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HIGHWAYS AND HORSES.



THE SNOW STORM OF DECEMBER 1886
The Devonport Mail leaving its team behind and going on with six fresh post horses.
This occurred near Amesbury, in Salisbury Plain.

THE PHOTOGRAPHIC COMPANY, LIMITED



THE SNOW STORM OF DECEMBER 1886
The Devonport Mail leaving its team behind and going on with six fresh post horses.



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THE

LIFE

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M45

CHARLES DICKENS AND EVANS,
CRYSTAL PALACE PRESS.

To

THE FOUR-IN-HAND AND COACHING CLUBS,
COUNTRY GENTLEMEN, MEMBERS OF HIGHWAY BOARDS,
ROAD SURVEYORS, COACHMEN,

AND ALL PERSONS WHO USE AND ARE INTERESTED IN THE CONDITION OF THE
QUEEN'S HIGH AND BYWAYS,

AND TO THOSE WHO REGARD THE WELL-BEING AND PROPER TREATMENT OF HORSES
AS A MATTER OF PARAMOUNT IMPORTANCE AND GRAVE NECESSITY,

AND WHO ARE INFLUENCED, NOT ONLY BY MOTIVES OF HUMANITY, BUT ALSO BY
ECONOMICAL AND PHILOSOPHICAL CONSIDERATIONS,

SINCE TO ILL-TREAT MEANS TO INJURE,
AND TO INJURE MEANS TO CAUSE A DEPRECIATION IN VALUE.

God, in permitting man to subjugate and subordinate dumb animals to his use,
EVIDENTLY TRUSTED THAT,
BY REASON OF HIS SUPERIOR INTELLIGENCE,
HE WOULD TREAT THEM WITH WISDOM AND HUMANITY.

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PREFACE.

SHOULD it be argued that the condition of the highways is a matter of interest only to a very small portion of the community, I can give a very conclusive and unequivocal reply to such a statement; let those who feel no interest in the condition of the highways cease to make use of them. If we require any proof of the influence their use exercises over the comfort and convenience of our lives, let us imagine a time when we are deprived of their use; let us imagine a snow-storm of such terrific violence and intensity, and lasting so long, that every road both of town and country is blockaded and rendered impassable for a month or more. What then would be the result of such a state of things? Would not every man, woman, and child throughout the kingdom feel then the vital importance of this means of communication of which they were deprived?

Most English people know what a London fog is, and are aware that it either puts a stop to traffic in the streets, or renders moving on wheels a matter of extreme difficulty, if not danger. The fog also penetrates into our houses, and renders all those occupations and professions to which the light of day is essential, utterly impossible. Painters, engravers, photographers, and numerous people of other trades and professions, are all forced to cease their labours and remain idle, because a darkness as of night—a darkness such as might even have alarmed Pharaoh—has spread itself like a

mantle over our modern Babylon. Beyond the utmost fringe of that mantle, the land may be bathed in bright winter sunshine, distant objects may appear unusually distinguishable, but over the metropolis of the world—as some too patriotic Englishmen have designated London—there is that overwhelming and invulnerable darkness, which bears not the slightest resemblance to the definition of a fog given by lexicographers, since by them it is described as a dense watery vapour exhaled from the earth. To attribute a London fog to such a cause is a great mistake, since it is undoubtedly owing to the existence of smoke held in suspension, which neither falls nor rises, since there is not sufficient movement in the atmosphere to waft it away. If the difficulty of progression in the streets and on the roads of the metropolis during a London fog paralyses traffic to such an extent, how much more terrible would be the total suspension of road traffic altogether!

Every one knows what it is when a road is taken up in town or country, and wheeled vehicles have to make a lengthened detour; but this experience and that of a London fog give us but a faint idea of what we should suffer if the roads were reduced to the condition they were in two or three centuries ago; but without imagining any such dire catastrophe as this, if fog can so materially interfere with the traffic of the town, how much more would a snow-storm, not confined to the town, but prevailing in all directions throughout the country. As I have before said, persons who have made light of the advantages arising from a perfect condition of the highways and a perfect system of road communication would then become fully sensible of their value. When roads are blockaded and rendered impassable, it is as though we were deprived of something which in a human being might be compared to one of our senses, such as hearing, smelling, tasting, or seeing; immediately that a thing so essential to our happiness, health, and comfort is denied to us, our imagination raises it to such a pinnacle of usefulness that, in our estimation, it becomes far more valuable than all the other

senses which remain to us, showing that we never appreciate fully the blessings we enjoy until we are deprived of them.

Although long journeys are no longer performed on high-roads, except when on a driving tour, yet we make short journeys on the road, either on foot, horseback, or on wheels, almost every day of our lives; the roads, in fact, we have always with us, beside us, and before us—almost any one living in a town has only to take half-a-dozen steps from his front door, and he stands in the centre of a public roadway—but the rail we use only occasionally. Into some persons' lives the rail, even in these days of excessive travelling, enters but very little; a journey in a train is one to be recorded; the number of railway journeys performed during the year can be reckoned upon the fingers of one's outstretched hand, but the little journeys made to and fro upon the road are too numerous for recollection.

The chapter on Past and Present speaks of the progress of civilisation during the eighteenth and nineteenth centuries; but the condition of the roads is perhaps one of the truest indications that exist of the progress that has been made by a country in the arts of civilisation.

A traveller gives us in his book of travels his experiences of being cast ashore on the coast of what he supposed was either a barbarous or uninhabited country; but after having walked for eleven hours without coming across a single indication of human occupation or habitation, or even the print of a human foot, to his delight he saw a man's dead body hanging from a gibbet. "My pleasure," he says, "at this cheering prospect was inexpressible, for it convinced me that I was in a civilised country."

This man dangling from a gibbet was to this traveller a convincing proof of the civilisation of the country. It must have been a most gratifying spectacle; at the same time I venture to suppose that a good macadamised road would have raised his drooping spirits to a still further height, since roads in most cases lead somewhere; and the better a road is, the greater prospect there is that the place to which it

leads will furnish one's necessities and offer adequate accommodation and shelter for one's person.

I venture to make one or two remarks upon driving, although in this volume I do not propose to enter into matters relating to the art of driving—that is, in an instructive sense.

In the course of a walk in any crowded thoroughfare in the fashionable part of London, it will be observed that out of fifty or more professional drivers that pass you by, there are not more than a dozen that know how to drive properly. In making this observation, I refer especially to coachmen in livery. I believe that a great many masters and mistresses are imposed upon; provided the man's character is good, and that he says he can drive, the new master or mistress appears perfectly satisfied. Whether he can drive or no, is a matter upon which they are frequently not qualified to express an opinion; provided that in the course of their drive they do not come into collision with anything, but return home safe and uninjured, they are perfectly contented. It matters not to them that their horses wear a gag bearing-rein, which is inflicting upon them severe suffering; that the cruppers are too tight; that the reins are buckled to the lower bar of a severe bit, when the horses would go better were they on the cheek; that the pole-chains are badly adjusted, and that their coachman looks more as though he were fly-fishing than simply driving a pair of quiet, tractable, and inoffensive horses.

Most of the coachmen in livery appear as though they wanted an extra hand, three instead of two—one for the whip, two for the reins—since when they whip their horses, it is with both hands still clinging to the reins, and not with the left hand holding the reins, and the right hand occupied with the whip. I have never understood yet, what makes them stick their elbows out at right angles from their sides, why their reins are divided wide apart, and when they pull their horses up, why they raise their hands to their chins, or even higher, all the while leaning back as though they were

endeavouring to lie down; if their horses were to stumble, how could they possibly save them from falling, since they have not got them properly in hand? You cannot persuade these gentry to keep their hands low, their elbows down to their sides, their reins firmly grasped in the left hand, whilst the right hand, that holds the whip, is ready to help the left hand by drawing the reins through it in order to shorten them, or to assist in guiding the horses. No, they must behave like mountebanks, separating their reins, and then when they wish to pull up, suddenly bringing up their hands in close proximity to their noses, or when desiring to touch up their horses with the whip, doing so with the right hand holding both the whip and the reins at the same moment, thereby giving a painful jerk to the horses' mouths, in addition to the cut of the lash. A pair of horses can be guided with one hand only, and with one hand be pulled up and made to turn round; of course this is a difficult matter, but as I have done it myself several times, I know it to be perfectly feasible.

Some people will never submit to be taught. It is not because they are not conscious of their deficiency, but because they are too narrow-minded to admit that they are deficient in the knowledge you are willing to impart. They cherish a feeling of false pride, which envelops their minds as in a mantle. I am not now speaking of servants, but of all people who ride and drive badly. I know doctors in the country who drive every day of their lives, and all day from morning to night, and yet they are shocking bad coachmen, with hands and arms all over the place.

I think that all the great men who have raised themselves to eminence from small beginnings must have been men whom it was exceedingly difficult to offend by giving them advice. Their minds must have been continually yearning for additional knowledge, and if the advice they received did not coincide with their opinion, or struck them as being worthless, I feel certain they received it in good part notwithstanding. That they

winnowed the grain from the chaff and rejected all that was useless, goes without saying ; at the same time they were in no way offended. Such men must have had marvellously receptive minds. Minds possessed of this quality are always gathering, always receiving impressions from the day of their birth to that of their death ; but some minds are not receptive. To the owners of such, much that takes place in the world is no more than a dumb show. Only such things as awaken their interest have any appreciable effect, and even then the interest they manifest does not appear strong enough to make them study to any advantage.

Riders and drivers who do both things indifferently are frequently unapproachable in the matter of advice. Provided that they start on a ride or drive, and return without having met with a serious accident, they appear perfectly satisfied with themselves. As for advice, and the minds that receive and reject it, in thinking of such things I am reminded of the Scripture parable, "A sower went out to sow his seed, and some fell upon good ground." The good and bad ground spoken of in this parable may be compared to the receptive condition of the human brain, which qualifies it for receiving or rejecting impressions, whilst the seeds of the sower may be compared to the advice or teaching which it is hoped will take root therein.

Most people are aware that to drive with comfort and safety, one must conform to the rules of the road, and this is more especially the case in crowded thoroughfares. It is merely owing to the fact that persons are willing to conform to these rules and abide by them, that the enormous traffic in the streets of London and other large towns is conducted with comfort and safety ; the slightest attempt to set them at defiance would, I feel certain, result in an accident.

In France the rules of the road are exactly the reverse to ours, and to any one who drives in Paris for the first time, this becomes evident ; as to an Englishman who has been all his life accustomed to what we consider the right and wrong side

of the road, the Continental rule of the road is most perplexing, since all one's former habits have to be reversed. In England,

The law of the road is a paradox quite :
In riding or driving along,
If you go to the left you are sure to go right,
If you go to the right you go wrong.

But on the Continent it is difficult to say where you would go ; if you followed these directions, you would most certainly come to grief.

I have spoken of civilisation. I would even go so far as to say that in a land which is admitted to be civilised there are degrees of civilisation—some parts are more civilised than others ; in like manner, some persons are more civilised than others. Not every part of, or every person in a civilised country can be taken as an example of the extent of its civilisation. In rural districts there is certainly a less amount of civilisation than in cities and towns, and the primitive or neglected condition of the roads is a strong indication that the arts of civilisation are not cultivated in that particular spot with the same energy and spirit as they are elsewhere.

If they can afford to do so, persons of an influential position in the country should endeavour, as far as they are able, to improve the condition of the district in which they live, that it may not be said to lack civilisation, although, perhaps, that word might not be used to describe its condition. In fact, they should endeavour to improve it in such a manner that it may compare favourably with other districts having the same natural advantages or disadvantages, rather than permit it to assume a neglected appearance, which gives strangers the impression that it has not shaken itself free from the fetters of a primitive and unenlightened age.

Large landowners are generally in a position to do this ; it is only their inclination that is wanting. In fact, every one having a particle of influence can combine with his neighbours in urging those who have the care of public

works to maintain them in a proper and suitable condition ; whilst every one individually can, in a manner, contribute to the welfare of the district in which they reside.

But it is the highways and byways of which I would more especially speak, as it is they that come within the province of this work, and it is they that offer the first indication, to persons visiting rural districts, of the condition of the neighbourhood.

The contents of this volume were suggested in a great measure by the state of the roads around my own country-house in Hampshire. I first agitated the question of improved road maintenance in the *Hampshire Chronicle* (published at Winchester), during two severe and trying winters ; and, encouraged by the interest with which the subject appeared to be generally regarded, I decided to go more deeply into the matter and commit to writing the result of my frequent observations, with a view to publishing a book on the maintenance of High and Byways.

As regards knowledge of various kinds of roads, I drive a great deal and have done so all my life. The autumn before last I drove from this house 260 miles in nine days. A few years ago I drove from here through Gloucestershire, Warwickshire, and Berkshire ; some time since I drove from London to Wales, *viâ* Oxford and Gloucester ; and before that I drove from London through the Midland Counties. I have driven from London to Brighton in the day with my own horses, changing half-way, and driven coaches in different parts of England ; so I may be said to have some experience of English roads.

My favourite carriage of late years for fast travelling and the performance of long distances has been a curricule, for reasons I will afterwards explain ; sufficient to say, that there is no weight on the horses' backs, the load is perfectly balanced, no carriage for two horses can be lighter or easier to ride in. The special curricule to which I refer is my own design ; it was a long time

before I succeeded in perfecting it. I had a four-horse curricule some little time back, but have now only a small curricule for two horses standing about fifteen hands.

Having driven very many miles upon country roads in various parts of England, besides taking long walks in Switzerland, Italy, and other parts of the Continent, I have had many opportunities of gaining information respecting roads.

In offering some explanation for venturing to write upon draught, traction, shoeing and the care of horses, I claim to be heard with some deference, being a coach and horse man of many years' standing, and having made a careful study of these subjects. I have nearly all my life possessed a horse of some kind, frequently considerable numbers. The long driving tours which I have undertaken, have given me an opportunity of observing the amount of work a horse can do on a variety of roads, passing through districts each possessed of a different soil, and over roads each differing slightly in its mode of construction.

When driving, I generally notice anything wrong with the vehicles I meet on my way or in the manner in which the horses are attached thereto.

I am writing now from my house in Hampshire, where, as my own architect and builder, I have erected stabling for several horses,* and to and from this stable have come and gone many young horses all varying in disposition, character, and quality; consequently I have had, especially during the last six years, plenty of opportunities of determining the best mode of treatment calculated to conduce to their comfort and well-being, I was on the point of saying happiness, since all efforts of kindly-disposed persons who seek to ameliorate the condition of animals must have the result, if steadily persevered in, of con-

* I trust that I may be excused for mentioning this, but I do so in order to prove that my remarks on the building of stables are the result of actual experience acquired after considerable expenditure of time, money, and patience.

tributing to their happiness. As I am confident that some people would ridicule this idea, I will endeavour to describe the various sensations which I imagine must be experienced by a horse in the full possession of health. From the time he is led out of his stable to go a journey or follow the hounds, until he returns home again, what is called freshness is the result of pleasurable sensations, superabundant vitality, a desire to give free vent to high spirits, a longing for unrestrained exercise of his muscular powers, just as boys, liberated from school after long hours of application to their studies, give expression in various ways to the pleasure with which they regard their release.

After a time a horse settles down; he has then reached the point at which his expressions of delight are modified by the labour he is called upon to perform, although this labour does not as yet materially interfere with the sensation of pleasure he experiences. After a time he feels some little fatigue, this at once quenches his spirit; he then enters upon a period where all exertion has ceased to be regarded by him with pleasure, and this causes him to relax his efforts and reduce his speed, which the driver's whip frequently urges him to maintain. In this condition he returns to the stable from which he started; but if, in the charge of a careful and conscientious groom, he be well fed, well groomed, and well cared for, his happiness may possibly return, although he is too fatigued to allow it to be apparent by any outward and manifest exhibition of feeling on his part. I have no doubt that what I have remarked is the case. A dog who bounds around his master barking and wagging his tail on being let loose from his kennel must surely experience some feeling of happiness, and so I have no doubt does a horse when he is what we denominate "fresh."

The Society for the Prevention of Cruelty to Animals have done a great deal of good work when mercifully interfering to protect animals from ill-usage, and, with all

my heart, I wish them success ; and yet they too frequently declare things to be cruel about which there is a question, whilst serious instances of cruelty and severe suffering appear either to escape their observation or meet with no rebuke or interference from them whatever. It is amongst the lower classes, who are uninfluenced by education and wise training in childhood, that cruelty is most prevalent and most to be combated.

To treat a horse cruelly is most intolerable ; and any one having the care of a horse would, were he to consider the matter, undoubtedly be conscious that to injure and ill-treat a beast from whom he expects so much, and upon whom he is so dependent, is false economy ; since he is, in fact, injuring himself as he depreciates the value of his own property. And even if the horse does not belong to him whilst he is making use of it, it is undoubtedly to his advantage to obtain the best results he can during its hours of labour.

In speaking of shoeing and my experience thereof, I would preface the remarks that I make in the chapter which appears in this work treating exclusively on that subject,* by saying that under no circumstances, except in the treatment of disease, do I ever allow a smith to pare the sole, cut the frog, rasp the hoof, or otherwise tamper with my horses' feet. As regards writing on such subjects, I am convinced that too constant reference to authorities is apt to retard the originality of one's own ideas. Any one writing about things with which they are thoroughly well acquainted, and knowledge of which they have gained at the fountain head of all knowledge, which is "Fact," when desiring to expatiate on such subjects need not altogether submit to the restraint imposed by other people's opinions when they are qualified to express one for themselves. By taking a line of their own the subject is more likely to be treated with originality.

* I refer to a further volume on the subject of Highways and Horses under contemplation, which may possibly follow this one.

The other day I sent up to town for a work I saw advertised on Climate, Weather, and Disease, published recently by Churchill, the medical publisher. I thought, of course, to receive a book giving the latest ideas on the subject, since the title gave me no reason to suppose otherwise; imagine then my surprise when I received from my booksellers a work treating upon the climate of Greece, as observed by Hippocrates, the Father of Medicine, who was born B.C. 460, just 2347 years ago. This, then, was the result of my desire for nineteenth-century opinions on the great subject of climate as affecting disease. This and other matters lead me to suppose that beneath the sun there is nothing new; and of this I am still further convinced, when reminded that we may seek of the Romans instruction in the science of road-making. I am persuaded, since this is the case, that no one can be certain of treating a subject with positive originality or even of giving utterance to an entirely original thought. What appears to people living at the present day as an invention of the very latest date may be only an old practice revived—something which existed centuries ago but was never completed or sufficiently established in people's favour to secure recognition; numberless, no doubt, are the things which we now regard as resulting from an advanced education, and the infinite information we possess, with which, if the truth were known, the ancients were well acquainted, as regards road-making: this is especially the case, since we might even at this period not be ashamed to follow in their footsteps or benefit by their wisdom.

Any one who reads Xenophon's treatise on the horse cannot fail to be surprised at his remarks on this subject, since his advice upon grooming and the general care and treatment of the horse might well be, with a few exceptions, written at the present day; and the works of other Greek and Roman authors frequently convey this impression, particularly those of Horace and the younger Pliny.

The Greeks were not very famous for their roads, and the

Romans, who were, say very little about them. In fact, if we are to believe Xenophon, some of the Greek roads were in anything but a perfect state, since he says, when describing how a horse should be treated by his master, that "the ground outside the stable may be put into excellent condition, and serve to strengthen the horse's feet if a person throws down in it here and there four or five loads of round stones, large enough to fill the two hands, and about a pound in weight, surrounding them with an iron rim, so that they may not be scattered; for, as the horse stands on these, he will be in much the *same condition as if he were to travel part of every day on a stony road.*"

If Xenophon means that all the Greek roads were in this condition, one cannot award to the Greeks the same meed of praise that one does to the Romans; it moreover must be remembered that horses in Xenophon's time were not shod as we shoe our horses, but only with a light sandal which must have worn out very quickly if they were made to travel over roads the surfaces of which were strewn with the large stones that Xenophon describes. The earliest mention of a horse-shoe, according to Berenger, is that of Childeric, who lived A.D. 481, of which the figure is preserved in Montfaucon's *Antiquities*, and which resembles the shoes in use among us. But for any horse, whether shod or not, to travel over such roads for any great distance would have been utterly impossible, except he were perfectly sound; in fact, none but sound horses could have travelled on such roads, and these roads were eminently qualified to make a sound horse unsound, however perfectly his foot might have been protected.

Considering that Xenophon lived 2,338 years ago, it is not surprising that the treatment of highways and horses should have been somewhat primitive. Although it was not very long after the period in which Xenophon lived that the Romans constructed roads far more nearly resembling our modern highways, and if we are to judge from the enormous time they have lasted, it is very evident that they were made in a

they erected, which were famed for their exquisite finish and their architectural and constructive beauty; the one people were, in fact, a nation possessed of superlative artistic faculties, whilst the other was a nation of warriors and builders. Although the Romans have also left behind them much that was architecturally beautiful, yet what they did in the way of public works, although, as a rule, great, stupendous, massive, and overwhelming, was yet frequently deficient in architectural beauty.

Had these two nations prospered at the same time, foregathered, and been consolidated under one government, each might have benefited by the prevailing taste of the other. Some of the Romans did, however, evince a strong inclination to follow the example of the Greeks, as is evident by the construction of their domestic buildings, particularly in Pompeii; but the sterner citizens of Rome regarded it as a matter for reproach when any Roman imitated the example of fastidious Greece, and affected Grecian tastes and habits. Appius Claudius, the constructor of the Appian Way, was chosen Censor in 312 B.C. After holding his office for eighteen months it was expected that he would relinquish it as ordered by the Æmilian law, but this he was unwilling to do as he was engaged in some great national works; these works still remain famous as the Appian Way and the Appian Aqueduct. The Via Appia, or Appian Way or road, is well known even to many who have not visited Rome, by the amusing description given by Horace of his journey upon it. It led from Rome to Capua, passing through the Pontine Marshes to Tarracina, and then skirted the seaward side of the Volscian Hills, by the pass of Lautulæ, and went on past Fundi, Formiæ, and Sinuessa to Capua. There had been a track before in this direction, but Appius improved it and made it fit for military purposes. It was at first only 120 miles long, afterwards it led to Naples and the southern extremity of Italy.

Horace, on the journey he describes, took fourteen days to travel 378 Roman miles; that he might have travelled

faster had he chosen to do so is proved by other journeys that were undertaken by the Romans. Cæsar posted 100 miles a day, Tiberius travelled 200 miles in twenty-four hours, and Statius speaks of a man leaving Rome in the morning and being at Baïæ, 127 miles, before night. In fact, Horace says himself :

Have but the will, be sure you'll find the way.
What shall stop him who starts at break of day
From sleeping Rome, and on the Lucrine sails
Before the sunshine into twilight pales ?

The Roman emperors at a later period were induced to establish throughout their extensive dominions a regular service of posts. Houses were erected at a distance of only five or six miles; each of them was constantly provided with forty horses, and by the help of these relays it was easy to travel a hundred miles in a day along the Roman roads.

Although the Appian Way was never destroyed, it was covered up, until the reign of Pius IX., beyond the tomb of Cæcilia Metella, and between the third and eleventh mile, Murray says that it was almost confounded with the surrounding Campagna, and was only marked out by the long line of ruined sepulchres which form such picturesque objects in that solitary waste. The work of restoration and excavation was commenced in 1850 and completed in 1853, and yet the whole cost of reopening the Appian Way did not exceed £3000; this included the removal of several feet of earth and rubbish that had accumulated during very many centuries. A wall was also built on either side of it to protect the monuments.

Some doubts have been thrown upon the antiquity of the top covering or surface of the road, which Murray tells us is formed of polygonal blocks of lava, probably from Vesuvius, and by some it is supposed that the causeway over which Horace, Virgil, Augustus, and Germanicus travelled on their way to Brundisium, will one day be discovered beneath these blocks of lava, which some suppose to be the work of people living in the Middle Ages. However this may be, we must

remember that the road Appius Claudius, the Censor, constructed, B.C. 312, was not even then the original road.

It must have been by this road that the Romans travelled to and from Pompeii. I have frequently ridden and driven over it when staying in Rome; in fact, if I remember right, the meets of the Roman fox-hounds used often to be held upon this road, the antiquity of which is most astonishing, when we consider that even dating it from the time of Appius Claudius, it is 2,200 years old. It seems, therefore, a sacrilege to indulge in such a modern sport as fox-hunting upon ground which, being classical, should be esteemed as sacred; but hunting was forbidden on a very different pretext, since Mr. Murray's Guide Book to Rome, published in 1862, says that, "hunting in the Campagna was prohibited in consequence of a deputation from certain ladies of the Roman aristocracy to his Holiness the Pope, asking him to forbid the sport, for fear their sons and husbands might break their necks." If such was the case, it proves beyond doubt that the character of the Roman people has sadly degenerated of late years. Where now is the courage and self-sacrifice of the Roman mother? Such timidity is enough to make the heroes and heroines of ancient Rome, after carefully collecting their ashes and piecing them together, rise from their graves to expostulate with these timid and weak-minded matrons who have thus brought into contempt the character of the Roman citizen. I am told that the jerry builder has now established himself in Rome, and that he is erecting his buildings even in the vicinity of the splendid old palaces, building on the economical and short lasting principle that would even in brick and mortar loving England be condemned as unfit for human habitation. This is another proof of Rome's degeneration, although in these later days it has become the seat of the constitutional government of United Italy.

In writing on these subjects I am not forgetful of the fact that very many coachmen of birth and education have no inclination for study of any kind; that, although ex-

cellent whips and fully comprehending how horses and carriages should be turned out, yet to what happy chance the various carriages with which they are acquainted owe their origin, or how the roads over which they drive have become established, is a matter of utter indifference to them; consequently the history of roads which I feel compelled to write at the commencement of this volume in order to trace matters connected with driving up to the present time, I fear will, to many of my readers, appear dry and uninteresting: even if this be the case, I feel I cannot omit what is so essential to a comprehensive work upon the subject of Highways and Horses.

Although the advent of the locomotive has diverted the traffic from the road to the rail, no one can be certain that some of it will not return when the application of electricity as a motive power has made still further progress: as regards my own belief, I anticipate a very great future for electric motive power in its application to carriages on common roads. At the same time I should regret any innovation that resulted in a depreciation of the quality of horses, or that in any way discouraged the breeding of horses. England has already suffered sufficiently in this respect; and it is a sad thing at the large sales of thoroughbred stock, that have from time to time taken place, to see so many good mares and sires purchased by foreigners and transported to a distant country.

LITTLEBOURNE, WINCHESTER, 1888.

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HIGHWAYS AND HORSES.

CHAPTER I.

THE HISTORY AND ORIGIN OF ROADS.

“The good of ancient times let others state,
I think it lucky I was born so late.”

COLLEY CIBBER.

The good old times—Consequences of the establishment of roads—Origin of byways or cross-roads—Peruvian, Greek, Carthaginian, and Roman roads—The Roman Empire—Roman roads in Britain—Alpine roads—The Mont Cenis Tunnel—The Grotto Pausilipo—The Pyrenees—American roads—Depopulation of English country districts—Concentration of wealth in London—Stagnant state of affairs in rural districts—Continental roads—English roads—Further history of roads in the reigns of Queens Mary and Elizabeth—Difficulty of transporting goods—Pepys’ Diary—Stage waggons and the first coaches—Shocking state of English roads—Scotch and Irish roads—Telford’s roads—The Holyhead road—The turnpikes—John Metcalf, the blind road-maker—Telford and the Scotch roads—MacAdam—London streets—Dirt and dust.

THESE two lines of Cibber’s are true and wise indications of the general feeling that animates the present dwellers in civilised countries. Nevertheless, there were advantages enjoyed by people in past times of which

the present generation are deprived ; but having been born in the present century, and benefiting as we do by the labours carried on through, and discoveries made in past times, none but lunatics would regret the fact that they first saw the light of day in the nineteenth century, consequently most persons will undoubtedly be of the same opinion as Mr. Cibber, and will think it lucky they were born so late.

What were the good old times of which so much has been said ? Was it when the streets of London and other towns were of a night in almost complete darkness ; when the roadways were impassable ; when both country and town were ill protected against robbery and outrage ; when a journey which now occupies only a couple of hours took an entire day or night ; when valuable property and possibly life was sacrificed on the way ? In my opinion those who live latest in the world's history are most to be envied, for as time progresses, so will the journey through life be rendered the more enjoyable, if, as I imagine, the comfort of the traveller is dependent on the period at which he sets forth on his travels.

Roads have at all times been the agents by which society has been consolidated ; they are to a certain extent the avenues of political, social, and commercial intercourse. Successive invasions, and final conquest and occupation, render commerce practicable, promote civilisation, and create history ; but it is roads that provide inlets and outlets for manufactured articles, that facilitate travelling, and break down local prejudices.

The existence of highways dates from a very early period. The same thing cannot be said with regard to byways ; there is little doubt that by-roads,

some of which are now of considerable importance, in fact leading thoroughfares, were once upon a time mere cart-tracks, after which, as the land became cultivated on either side of them, they were probably fenced in. In course of time they became green lanes ; and afterwards when houses, farmsteads, or cottages were built beside or near them, they passed through a still further state of transition : stones of some description were laid down, and they were by gradual process converted into established roadways. Possibly later on they fell under the jurisdiction of Highway Boards, and became subjected to parochial maintenance. Leading, as they frequently did, from one important highway to another, they were indispensable to the inhabitants of the districts through which they passed, and it is on these roads that you frequently observe every fault which a road can possibly possess, for this reason : no skill of any kind, but mere chance, led to their formation. Probably the first man who drove his cart and horse over some rough moorland or across low-lying ground, using his discretion in avoiding whatever obstacle came in his path, was the first pioneer of what afterwards became very probably an important road, since where one goes another is almost certain to follow ; and so the mere track becomes in process of time an important thoroughfare, which eventually, owing to its erratic windings and its eccentric way of overcoming gradients, excites in the minds of all intelligent persons who use it, the utmost derision, vexation, and scorn.

But with high-roads it is quite a different matter ; but as regards the high-roads and by-roads of Great Britain at the present day, they are like veins and arteries which intersect its entire system in the same manner

as do the veins and arteries of the human body, London being the heart, whereas the other big towns throughout England, Scotland, and Wales may be said to represent the less important blood-vessels. But in speaking of highways, we must remember that they did not owe their existence to mere chance, like byways; they were formed by competent road constructors, who were probably the most able men of their time in this particular branch of industry to penetrate the kingdom in all directions and connect towns of importance.

In early days there is no doubt that all attempt at locomotion on wheels away from the main roads was an impossibility. But to speak of the commercial importance of good roads, they are of importance to commerce in so much as they tend to civilise a country. Roads are always the first things thought of in new countries and by early settlers, and the construction of roads always follows upon an invasion and occupation of a foreign country.

To cite an instance of skilful road construction in past times, the Peruvians were great road-makers. There is a magnificent road from Quitto to Cusco in Peru, extending into Chili over the grand Plateau, and passing over pathless sierras, through solid rocks, and over bridges suspended almost in mid-air. There are roads in Peru extending from fifteen hundred to two thousand miles. The road from Quitto to Cusco is twenty feet wide, made of freestone, with bituminous cement on the top. I merely mention these roads as showing the skill possessed by the ancient inhabitants of these regions, and the ability with which they overcame the extraordinary difficulties presented by Nature.

Under the heading of Roads in the French Encyclopædia are the following interesting facts:

“The policy of road maintenance does not begin to show itself as worthy of consideration until the prosperous times of Greece. The Senate of Athens watched over them. They were by the Lacedæmonians, Thebans, and other states, confided to the care of their most eminent men. It does not, however, appear that this display of wisdom produced any considerable effect in Greece. It was reserved for a commercial people to benefit by facility in travelling and transporting goods; hence it is that the invention of paved roads is attributed to the Carthaginians.

“The Romans did not neglect the example of the Carthaginians, and this particular industry is most creditable to the Romans. The first road they made was the Via Appia,* the second the Via Aurelia, the third the Via Flaminia.

“The public and the senate held the roads in such estimation, and took so great an interest in them, that under Julius Cæsar the principal cities of Italy all communicated with Rome by paved roads. The Roman roads from that period began to be extended into the provinces.

“During one of the last great wars in which the Romans were engaged, they made a road with rectangular broken stones (*‘de cailloux taillés en quarré’*), from Spain through Gaul to the Alps.

“Domitius CEnoberbus paved the Via Domitia, which led to Savoy, Dauphiny, and Provence. The Romans made in Germania another paved road. Augustus, when emperor, paid more attention to the great roads than he had done during his consulate.

* The Appian Way.

He conducted roads into the Alps; his stupendous plan was to continue them to the eastern and western extremities of Europe. He gave orders for making an infinite number in Spain; he enlarged and extended the *Via Medina* to *Gades*. At the same time, and through the same mountains, there were opened two roads to *Lyons*: one of them traversed the *Tarentaise*, and the other was made in the *Alphenin*. When *Agrippa* succeeded, he seconded *Augustus* ably in this respect. It was at *Lyons* he began the extension of roads throughout *Gaul*.

“There are four of them particularly remarkable for their length, and the obstructive nature of the country through which they passed. One traversed the mountains of *Auvergne*, and penetrated to the bottom of *Aquitaine*. Another was extended to the *Rhine* at the mouth of the *Meuse*, and followed the course of the river to the *German Ocean*; the third crossed *Burgundy*, *Champagne*, and *Picardy*, and ended at *Boulogne-sur-Mer*; the fourth extended along the *Rhone*, entered the bottom of *Languedoc*, and terminated at *Marseilles*. From these principal roads there were an infinity of branch roads, namely to *Trèves*, *Strasbourg*, *Belgrade*, etc.

“There were also great roads from the eastern provinces of Europe to *Constantinople*, and into *Croatia*, *Hungary*, *Macedonia*, and to the mouth of the *Danube* at *Torres*.

“In *Sicily*, *Corsica*, *Sardinia*, *Britain*, *Asia*, and *Africa* the roads to a certain extent communicated with the roads of Europe by the nearest ports. The industry of the Roman road-makers will ever remain unsurpassed, when we consider the extent of their highways and the difficulties they encountered, the forests they

cleared, the mountains they severed, the hills they lowered, the valleys they filled up, the marshes they drained, and the bridges which they built."

Tredgold, in his book on railways, says that "the Roman roads ran nearly in direct lines; natural obstructions were removed or overcome by the efforts of labour, science, or art, whether they consisted of marshes, lakes, rivers, or mountains. In flat districts, the middle part of the road was raised and embanked. In mountainous districts, the roads were alternately cut through mountains or raised above the valleys, so as to preserve either a level line or a uniform inclination. They founded the road on piles where the ground was not solid, and raised it by embankments and strong side walls, or by arches and piers, where it was necessary to gain sufficient elevation. The paved part of the great military roads was sixteen Roman feet wide, with two raised paths of two feet wide on either side."

Bergier says, in his "*Histoire des Grands Chemins de l'Empire Romain*," that "the funds for making roads were so well secured and so considerable, that the Romans were not satisfied to make them convenient and durable, but they also embellished them."

They had columns placed from mile to mile to mark the distance of one place from another; blocks of stone for foot travellers to rest upon, and to assist horsemen to mount their horses; and also temples, triumphal arches, and even mausoleums and military stations. Such was the solid construction of the Roman highways, that their firmness has not entirely yielded to the effect of fifteen centuries of traffic. They united the subjects of the most distant provinces by an easy and familiar intercourse; but their primary

object was to facilitate the marches of their legions of soldiers.

It is difficult to judge of the enormous extent of the Roman Empire. The only empire in any way to be compared to it was that established by the great Napoleon, whose conquest constituted him for a time a despotic ruler over the greater part of Europe; or Charlemagne, whose invasions brought the greater part of Europe under his sway. According to historians, the Roman territory measured six hundred leagues from north to south, upwards of a thousand from east to west, and extended over a surface of eighty thousand square leagues, and this area embraced the richest and most fertile countries in Europe. On the north, the Empire was bounded by the wall of the Caledonians or Picts, the Rhine, the Danube, and the Black Sea; the Picts' wall, which bisected Scotland in its narrowest point, left the Romans in possession of the Lowlands of Scotland, and the whole of England. The Rhine and the Danube separated Roman Europe from the less civilised nations on the other side of these two great rivers. On the east the Empire was bounded by the mountains of Armenia, by a part of the Euphrates, and by the desert of Arabia.


What seems so remarkable, is, that there should have been a sufficiently large army of Romans to subjugate the vast number of inhabitants occupying these regions; it is a convincing proof of the power that may be exercised over uncivilised people by a well-disciplined, armed force, bearing with them (into the countries which they invade) the elements of peace and civilisation, as well as the destructive and awe-inspiring horrors of war.

It was into the East that the Roman Empire

reached furthest, even as far as Mesopotamia, whilst everywhere about Europe, so far as the Empire extended, were roads such as would do credit to modern engineering skill.

The aggregate of the Roman legions amounted to 375,000 men ; in fact, the entire military establishment of the Roman Empire never exceeded 400,000 men.

The Emperor Diocletian divided the Empire into four pretorian prefectures ; these prefectures were Gaul, Illyricum, Italy, and the East. Each prefect had under his orders a vicar. The Prefect of Gaul, which included Britain, resided at Trèves. The Illyrian prefect resided at Sirmium, not far from Belgrade and from the Danube, or at Thessalonica. The prefecture of Italy included, besides the province from which these conquerors of the world had emanated, the whole of Africa from Egypt to Morocco. Rome and Milan were alternately the residence of the prefect of Italy, but Carthage was the capital of the whole province. It equalled Rome in population as well as in magnificence. A writer says the imagination is confounded by the enumeration of the provinces of Rome, and by the comparison of them with any existing empire. Our astonishment is heightened when we call to mind the vast and splendid cities by which each one of them was adorned ; cities several of which equalled, if they did not surpass, our largest capitals in population and opulence ; cities such as Antioch, Alexandria, and Carthage. The ruins of some are yet standing, and surpass all modern cities in magnificence. The legions of Rome were distributed over the length and breadth of the Empire ; the pacific provinces of Egypt, Africa, and Spain had but one legion ; but the city of Rome, on



the tranquillity of which the safety of the Emperor and Empire depended, was kept in awe by a body of 20,000 soldiers distinguished from the remainder of the army by the Emperor's especial favour and higher pay. They were called the Pretorian Guard. But, as this is not a history of Rome, I must return to the subject of roads.

Widely as the Empire extended, Mr. Gibbon in his "*Decline and Fall of the Roman Empire*," after enumerating all the cities in the different parts of the Empire, says: "All these cities were connected with each other and with the capital by the public highways, which, issuing from the Forum of Rome, traversed Italy, pervaded the provinces, and were terminated only by the frontiers of the Empire. If we carefully trace the distance from the wall of Antoninus (in Britain) to Rome, and from thence to Jerusalem, it will be found that the great chain of communication from the north-west to the south-east part of the Empire was drawn out to a length of 4080 Roman miles, or 3740 English miles. The public roads were accurately divided by milestones, and ran in a direct line from one city to another, with very little respect for the obstacles either of nature or private property; mountains were passed, and bold arches thrown over the broadest and most rapid streams. The road in low-lying districts was raised into a terrace or embankment, which commanded the adjacent country, and consisted of several strata of sand, gravel, and cement, and was paved with large stones, which, in some places near the capital, were of granite."

The following are Mr. Pickerton's observations on the Roman roads:

"One of the grand causes of the civilisation intro-

duced by that ruling people (the Romans) into the conquered States, were the highways, which form, indeed, the first germs of national industry, and without which neither commerce nor society can make any considerable progress."

Conscious of this truth, the Romans seem to have paid considerable attention to the construction of roads in the distant provinces; and those of England, which may still be traced in various ramifications, present a lasting monument of the justice of their conceptions, the extent of their views, and the utility of their power. A grand trunk, as it may be called, passed from the south to the north, and another to the west, with branches in almost every direction that general convenience and expedition could require.

Mr. Eustace says, in his "Classical Tour:" "Thus the civilised world owes to the Romans the first establishment and example of a commodious intercourse; one of the greatest aids of commerce and means of improvement that society can enjoy."

Mr. Smiles, in his life of Sir Hugh Myddelton, speaks of a Roman causeway which was discovered in the Fen districts.* He says that it was about sixty feet broad and laid with gravel about three feet thick. A cutting made across it at Eldernell shows the permanent manner in which the Romans did their work. It was laid upon the moor, the lowest layer being of oak branches, then a considerable thickness of Northamptonshire rough flagstone, then alternate layers of gravel with small layers of clay, which together have formed a cement that nothing but the vigorous application of the pick can remove.

* In Lincolnshire.

But in speaking of ancient highways, Englishmen, in consequence of the Roman occupation of Britain, should be most interested in those constructed by the Romans during their stay in this country. Doing everything well, they were remarkably skilful in the construction of their roads; in Italy there are fourteen thousand miles of Roman roads. The Romans, when they made a road, excavated all the loose earth until a solid foundation was reached; if this was not obtainable, they filled in with hard or solid substances, frequently driving piles into the ground beneath the foundation of the road, then filling in with rubble, cement, broken stone, bricks and pottery, on the top of which blocks of stone were laid, interlocked like a stone-paved street; the width of these roads was never very great, being thirteen to fifteen, and sometimes as narrow as eight to eleven feet wide. There were raised footpaths on either side, which clearly indicates the desire for comfort and convenience, which at all times prevailed amongst the Romans, even when living as exiles in a foreign land.

The roads constructed by the Romans during their occupation of England were Watling Street, Ermine Street, Foss-way, Ikonild Street. Watling Street began at Richborough in Kent, passed through London in a N.W. direction, and extended as far as Chester; Ermine Street commenced at London, and passing through Lincoln was carried through Carlisle and thence into Scotland; the Foss-way branched off in a S.W. direction from Ermine Street to Bath, and Ikonild Street extended from Norwich in a S.W. direction to Dorsetshire. From each of these roads branches extended.

There is a Roman road from Winchester to Salis-



PHOTO BY THE AUTOMATIC SURVEYING CO., LIMITED.

THE BRÜNING PASS.

bury, called the old Sarum Road ; leaving Winchester, it passes Teg Down, Crab Wood, Horsebridge Mill, and so on through Bossington.

It always seems to me a great pity that such famous roads as the Romans made should not be maintained and used at the present day, particularly as they appear to traverse the country in the directions most desirable, and connect many of our large towns.

In speaking of other roads than those of Great Britain, I would mention those that the great Napoleon constructed across the Alps. The engineers employed upon these roads were all French and Italian, and their works are triumphs of engineering ; and what makes them still more remarkable is that they were made in very great haste to meet the exigencies of war. The roads are quite as marvellous as those I mentioned in Peru ; they ascend the steepest mountains climb along the face of precipices, and cross bridges over almost unfathomable gorges. The engineers who constructed them at the order of Napoleon appear to have surmounted difficulties calculated to intimidate the most determined hearts.

In mentioning these roads I speak from experience, being well acquainted with all the great roads over the Alps from Switzerland into Italy.

Previous to the year 1800, until Napoleon made his Alpine roads, the only means of conveying goods was on the backs of men, horses, or mules ; even now, upon all the less frequented passes the entire traffic is carried on by the use of pack-saddles, or goods roughly slung over the backs of ponies, mules, or donkeys. The ponies used in the Bernese Oberland are clever and sure-footed, but they are not so good as the mules of Chamouni and other parts

of course. All Swiss riding-saddles have a long projection behind on which goods can be carried not exceeding a weight of 50 lbs. The Swiss law does not allow this weight to be exceeded unless the animal be led and not ridden, when in place of the rider a large quantity of baggage or goods may be thus conveyed.

A pass does not in every case mean a road by which vehicles can pass; many of the so-called passes are foot or bridle paths. A pass signifies a way by which travellers can go. A pass is a depression in a range of mountains facilitating a passage across them either on foot or horseback. There is no doubt that such ways being so frequently used become worn into legible tracks, and that various insignificant efforts are made by the inhabitants of these regions to facilitate the passage over them and provide shelter on the way; but they are not roadways, and it remains for a powerful Government or a sovereign ruler such as Napoleon to authorise or command their conversion into a wide roadway, supplemented by numerous bridges and protected by avalanche galleries.

Many persons who are not acquainted with Switzerland may wonder what an avalanche gallery is. This I will endeavour to explain, and when I have done so, I think they will admit that there are perils attending the construction, maintenance, and even the travelling on a Swiss mountain road, which are never dreamed of by those accustomed to our level and unromantic highways.

When during the spring and summer the snow is melting in the high Alps, it is apt to glide away from the place it has occupied during the winter. As it moves onward and downward other drifts are loosened

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THE GALLERY OF ST. JOSEPH, ON THE SIMPLON ROAD.

and displaced, and so little by little it increases on its course until it is one vast moving sea of ice and snow, sufficient to demolish anything that offers to obstruct its progress, no matter what it be. Forests of trees are uprooted and swept away like grass beneath a scythe. Mountain huts are demolished, and even entire villages have been known to fall a prey to the relentless avalanche. It is to protect the great mountain roads from this influx of ice and snow, and to prevent the road being blocked, that galleries are made. The avalanche in its descent then passes over the gallery, whilst at the very same moment conveyances can pass through it in perfect safety. A pistol-shot or the cracking of a whip is sufficient in the still, rarefied atmosphere of the mountains to occasion the fall of an avalanche. In fact, when the mass of ice and snow, owing to the heat of the sun, is already loosened from its bed, it does not require a serious concussion to send it flying down towards the valley.

I have frequently watched avalanches fall in various parts of Switzerland. At first a very slight rumbling sound is heard, like distant thunder, which increases in power as the avalanche descends; but I have often seen them falling fast, one after the other, and their course, after they have disappeared, has been clearly marked out by the line of their destructive passage. Grindelwald is one of the best places I know to witness avalanches; also the Trümleten Valley which separates the Jungfrau from the Wengern Alp. Even close to the Jungfrau Hotel a view may be obtained of the descending avalanche without incurring any risk.

Thus the fall of avalanches alone provides the

road-makers with perpetual diversion and employment during the early spring months. There is one thing to be said of mountain roads, that in most places their inclination assists the act of drainage, but even on the highest mountain passes, occasionally the road is level for a considerable distance when passing through elevated valleys.

The principal roads over the Alps are as follows :

The Mont Cenis, 6825 ft.

The Simplon, 6636 ft.

The St. Gothard, 6808 ft.

The St. Bernard, 8200 ft.

It will be seen that the St. Bernard is the highest, and it was in consequence of this fact that Napoleon decided to make other roads more suited to the passage of his artillery which, being at a less altitude, were less likely to be blocked by snow and ice.

The celebrated passage of the Alps was commenced by Napoleon, May 16th, 1800, and occupied four days. The St. Bernard had been reported by Marescot, chief of Napoleon's engineers, as scarcely possible for artillery. "As you admit that it is possible, let us start, then," was the energetic reply of Napoleon.

The part of the road which most tried the troops was that from St. Pierre to the summit. The artillery carriages were taken to pieces and packed on mules, the ammunition was also transported; whilst the guns themselves, placed in the trunks of trees hollowed out, were dragged up the mountain by main force, the soldiers receiving 1200 francs for each cannon so conveyed. At the hospice each soldier partook of the hospitality of the monks. Since then there is a new road. The old road must have been very bad, otherwise the guns might have remained

on their carriages and been hauled up the pass by a number of mules and horses. Every one is familiar with the pictures that have been painted from time to time of Napoleon crossing the Alps, engravings from which are frequently to be seen.

It must be remembered that these roads are rendered impassable during the winter months, owing to the depth of snow on their surface. In some cases this difficulty is overcome by resorting to the use of sledges. I remember passing over the Simplon, from Italy into Switzerland, about twenty years ago ; the road was not really open, even the mails had only just ventured to cross. I was travelling with a young fellow about my own age, when we determined to make the attempt, notwithstanding the remonstrances of the aborigines. When we approached the summit we had to enter a sledge, which was so repeatedly capsized that we determined to walk, as the snow on the surface of the track was fairly hard. We had three horses to our sledge, one of which I recollect we lost ; this was the leader. He got engulfed in a drift into which he had inconsiderately plunged. The glare and the heat was very considerable, although the snow was nearly thirty feet above the road, the telegraph posts just peeping out of the snow, which clearly indicated to what depth they were buried.

I remember to this day that the avalanche galleries through which we passed presented a very lovely appearance, as on either side of them the tunnel was continued through ice and snow, the rays of the sun without being reflected on the walls of ice within, producing the most marvellous prismatic effects. When we arrived on the Swiss side of the mountain, astonishment was expressed that we had not rolled

down into the valley, or shot over one of the many precipices which we had passed; and certainly our escape was marvellous, seeing how many times we had been capsized close to the very edge of the snowy track, beyond which was nothing but a sheer descent of hundreds of feet.

It must be remembered that the Simplon road is not even a very high pass, being only 6636 feet above sea-level. It was commenced on the Italian side in 1800, and on the French side in 1801. The road was decided upon by Napoleon immediately after the battle of Marengo, whilst the recollection of his own difficult passage of the Great St. Bernard was fresh in his memory.

The Simplon Pass was considered at the time a stupendous result of engineering skill, but the gigantic works of recent times have equalled and surpassed it. The finest point of the Simplon road is the Gorge of Gondo. The surveys of this road were made by M. Céréd; it took six years to complete these surveys; more than 30,000 men were employed in the construction of the Simplon road at one time. There are 611 bridges, great and small, in addition to the far more costly works, such as terraces of masonry miles in length; ten avalanche galleries, either quarried or built; and twenty houses of refuge, to shelter travellers and lodge the road-makers engaged in maintaining the road. Its breadth is never less than twenty-five feet, and the slope nowhere exceeds one foot in thirteen, although it has to ascend to a height of 6636 feet. Its cost averaged £5000 a mile;* in England the average cost of constructing a turnpike road is £1000 a mile.

* The entire road cost eighteen million francs.



PHOTOGRAPH BY THE AUTOMATIC INFORMATION CO., LIMITED

THE SCHÖLLINEN RAVINE. ST. GOTTHARD ROAD

The object of Napoleon in its formation is well explained, when on two different occasions he asked the engineer sent to him to report progress, "Le canon quand pourra-t-il passer au Simplon?" showing that his thoughts were all bent upon war, and not upon the encouragement of commercial enterprise, or the establishment of peace.

The Pass of the St. Gothard, 6808 feet, is a most excellent road, and renowned for the grandeur of its scenery; even in winter travellers can sometimes cross it in sledges. The traffic when the road is open far exceeds that of any other Alpine pass at so great an altitude; the principal traffic is from North Switzerland and Germany into Italy.

The Devil's Bridge is in the midst of the Schöllinen ravine, which is a rocky ravine running two and a half miles between gigantic granite cliffs. The Schöllinen is the grandest feature of the St. Gothard road, not surpassed throughout Switzerland, and the Devil's Bridge is in the midst of this terrific ravine; there is not an inch of ground upon which a human foot can rest except what has been hewn out of a solid wall of rock, and yet here is a wide, well-constructed, well-maintained road and a bridge, perfectly proportioned and constructed. Murray says that this point of the road must have been a *cul de sac* until the torrent was bridged and the rock excavated. The old bridge was abandoned for the new, which rises to a higher level. The old bridge was twice the scene of extraordinary conflicts during two campaigns, within six weeks of one another.

On August 14th, 1799, the French, under Lecourbe and Loisen, surprised the Austrians, who held the valley of the Reuss, and drove them across the bridge,

and eventually caused them to vacate the valley altogether. The old bridge was eventually blown up on September 24th. The Russians, under Suwarrow, crossed the St. Gothard, and drove the French before them. Consequently it will be seen, that not only does the bridge form a striking feature of this remarkable road, but it was also the scene of two events in the history of French warfare.

One of the avalanche galleries at the end of the Schöllinen ravine is 180 feet long; it is called the Winerloch tunnel. Before this was bored no wheeled traffic could pass this mountain; travellers had to creep round the rocky projecting face of the cliff on wooden planks suspended by chains from the face of the precipice. The descent of the road over the St. Gothard into Italy is contrived by twenty-eight zigzags.

The Pass of the Great St. Bernard is 8200 feet. This pass is remarkable for its hospice, monks, and dogs, although there are dogs nearly, if not quite as good, to be found on the other passes. At St. Pierre, a wretched village one hour up from the French side, is a military column to the younger Constantine, dated the eleventh century, showing that the Romans were familiar with these passes. Napoleon made his celebrated passage over the Great St. Bernard in 1800, and experienced great difficulty in transporting his artillery, as I have already explained.

The hospice stands at an elevation of 8200 feet; in fact, it is at the summit of the pass. As many as 2000 travellers cross this mountain in the months of February and March. In 1844, 19,000 travellers crossed over this mountain.

The Mont Cenis Pass is 6825 feet; this, too, was

an important pass, but recently a tunnel has been made through the mountain, and also through the St. Gothard, a work which even surpasses the roads constructed over their summits at the order of Napoleon. Had the little Corsican lived at the present day, he would have had no reason to complain because there was a want of facility in transporting troops or weighty artillery. Before the existence of the tunnel, sledges used to be employed in winter to cross the snow-covered pass; fourteen men were often required, and twelve mules, to conduct the *diligence* across this mountain in safety.

A great many of the so-called passes are only bridle-paths and not carriage-roads; some of them are not even bridle-paths, being too precipitous for anything but pedestrians. There is no doubt that a great many of these might be converted into carriage-roads, but since they lead to and from no important places, it would be a useless expense to convert them; in fact, the Mont Cenis, St. Bernard, St. Gothard, and Simplon, the four greatest passes, are becoming disused owing to the construction of the tunnels, and now that tunnelling through mountain ranges has met with such success, there is no saying to what extent it may not be carried. Why tunnels should not be provided for ordinary traffic as well as for the passage of the locomotive, it is difficult to say; of course the illumination and ventilation of such long tunnels is not only expensive, but is a matter of great difficulty.

In speaking of these tunnels I may be departing somewhat from the subject of roads, but as there is no reason why common roads should not penetrate through tunnels, thereby avoiding severe declivities,

I think I may be excused for speaking of the two great Alpine tunnels beneath the Mont Cenis and St. Gothard.

In the *Times* newspaper, December 24th, 1870, the following appears respecting the Mont Cenis tunnel*: "The total length from Bardonnèche to Modani is rather more than seven miles and a half. At first the progress was very slow, and at the beginning of 1863 there remained fully six miles of tunnelling to be accomplished. At that time it was not supposed that the tunnel would be completed before 1875, but by the introduction of boring machines wrought by compressed air, rapid progress has since been made, more especially during the past four years. From Modani, on the French side, to the middle, there is a rise of one foot in forty-five and a half, and from the middle to Bardonnèche on the Italian side, it falls one foot in 2000. The Grand Vallon, under which the tunnel passes, is 11,000 feet high."

The Mont Cenis lies between Savoy and Piedmont. In the *Times* newspaper, September 13th, 1871, it is stated that the first train, with the engineer Grattoni and some friends, passed through the northern outlet in forty minutes. The maximum temperature inside the carriages was 25° Centigrade. Two hours later the train returned to the Italian side, the journey occupying fifty-five minutes; the tunnel was then found entirely free of the steam discharged during the previous journey. The formal opening of the tunnel took place on the 18th of September, when a banquet was held to celebrate this great achievement of engineering skill, and a statue of Poleocapa, Minister

* The opening of this tunnel for passenger traffic was not authorised by the Sardinian Legislature until 1871.



PHOTOGRAPH BY THE AUTOMATIC ENGINEERING CO., LIMITED.

ON THE ST. GOTTHARD ROAD.

of Public Works for Sardinia, was unveiled by the King at Turin.

I am told that when the borings were being made, so exact were the gradients one with another, that just before the two tunnels met half-way, the French workmen could hear distinctly the men at work on the Italian side, and *vice versâ*; and that when the intervening rock was broken through, either blasted or removed with picks, the floors of the two tunnels did not vary but a few inches in their level.

As regards the *Times* saying that the steam had disappeared from the tunnel on the return journey, I suppose the smoke is meant, as the steam would naturally become condensed after a few minutes, even in an atmosphere of 25° Centigrade. Although the act of condensation might be delayed a little, it could not be prolonged indefinitely. In this case the return journey is said to have been made after a lapse of two hours, and the journey itself occupied fifty-five minutes, so that there were nearly three hours between the time the train passed and returned, and it would indeed have been a singular thing had the steam remained in a state of vapour for such a length of time. It is the smoke and not the steam which makes the Metropolitan District Railway (commonly called the Underground) so unpleasant and unwholesome.

There are many tunnels through which common roads pass, but I cannot this moment recollect their names. The Grotto Pausilipo, near Naples, is a tunnel through which the high-road from Naples to Pozzuoli passes. With this tunnel I am well acquainted, having frequently ridden through it on horseback; it is cut out of the solid rock, its length is two-thirds of a mile, and it is sixty feet in height

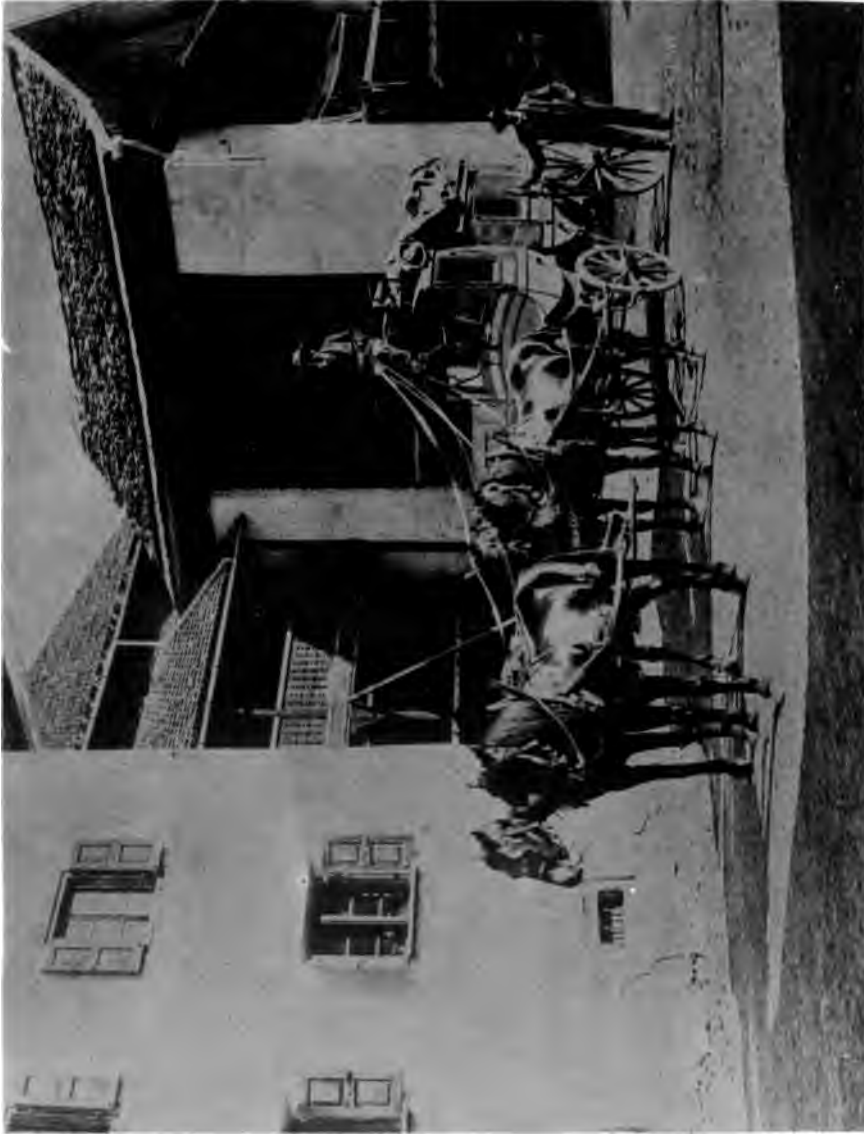
and wide in proportion. This tunnel is of great but unknown antiquity. Seneca, in his Fifty-seventh Epistle, complains of its length, darkness, and dust ; it is now well lighted both by night and day with lamps on either side, and is also fairly well paved ; it was enlarged in the year 1557. Seneca speaks of it as follows : “ Nihil illo carcere longius, nihil illis faucibus obscurius etiam si locus haberet lucem pulvis aufereret.”

Canals frequently pass through tunnels, but canal traffic has almost been superseded by the railway, proving that the enormous expense and labour incurred by the Duke of Bridgwater and others in the construction of canals evinced considerable want of foresight ; as although in the midland counties rail and canal traverse the country side by side, many canals through which a large traffic once passed are now disused and abandoned ; but into this condition common roads can never fall, no matter what other routes be provided by which passengers and goods can be transported.

It is to Maunder that I am indebted for the following particulars :

“ The Pass of Mont Cervin exceeds 11,000 feet in height, and surpasses in altitude any other pass in Europe ; it is not, however, practicable for carriages, in fact it is only a bridle-path. The road over Mont Stelvio, near the head of the valley of the Adige, which leads from the Austrian province of the Tyrol into Lombardy, exceeds 9000 feet, and is the highest carriage-road in Europe. All those portions of the Alps which exceed eight or nine thousand feet in altitude fall within the limits of perpetual snow, which everywhere covers the higher parts of the mountain system. The height of the snow-line





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A SWISS MAIL COACH OR POST.

of course varies in different localities, as well as with the seasons of the year. It is uniformly higher on the southern or Italian face of the Alps than on the northern or Swiss side, and it naturally descends lower during the winter than during the summer season, but at a greater height than 9000 feet the snow never melts.* The accumulating mass which successive winters form in the elevated regions is impelled downward by its gravity into the lower valleys, where it forms the well-known glaciers."

To quit the Alps and speak of other mountain ranges, I am reminded that the passes through the Balkans, though of no great altitude, consist of deep and narrow defiles, yet none of these mountains reach the height of perpetual snow.

The roads across the Pyrenees consist of deep and narrow defiles, with high walls of rock on either hand. The southern face of the Pyrenees is more rugged and precipitous than its northern slope, so that the ascent on the side of Spain is generally more difficult and laborious than from the French side of the mountain.

The inclination of the northern declivity of the Pyrenees is from 3° to 8° ; that of the southern declivity of the highest Alpine mountains is only $3\frac{3}{4}^{\circ}$. Notwithstanding this circumstance, it is necessary to mount at times much steeper inclinations. Even a slope of between 7° and 8° is very considerable; in fact, it is almost the maximum for vehicles. In France the regulations are that the road shall never exceed an inclination of $4^{\circ} 46''$. An inclination of 15° can hardly be overcome by animals encumbered with

* In central Europe. In warmer regions, and those nearer the equator, the snow-line is of course at a greater altitude.

a load, whilst man himself cannot climb a slope of 35° unless he ascend by steps.

Having mentioned the principal passable European mountain ranges with which Englishmen are most familiar, I am reminded that America possesses a range of mountains over which there is a great and rapidly increasing traffic. The Rocky Mountains are the most elevated portion of the northern half of the Western Hemisphere. They form, as it were, the backbone of the North American continent, through which they stretch from north to south for 3000 miles below the parallel of 30° . The passes over the Rocky Mountains are not narrow defiles, like those that traverse the mountains of the Old World, but consist of broad arid plains. Between the thirty-third and forty-second parallels there is no route across the mountains capable of being easily traversed; but to north of 42° there are many practicable passes. The two principal of these, which lie within the territory of the United States, are distinguished as the North and South Passes. Both of these are at an altitude of 7000 feet above the sea. Within the British territory—that is, the north of the forty-ninth parallel—the passes over the mountains are of considerably less elevation. The Union Pacific Railway now passes over the Rocky Mountains, and one cannot but feel astonished at the engineering skill which has carried a railway successfully at such an elevation. Rising from the eastern plains, the scenery is very grand until the coast is reached. Ascending from Truckee, for fifteen miles the line passes through long lines of snow-sheds, until Summit Station (7042 feet) is reached. From the summit to Colfax, on the western side, which comprises a distance of

fifty-one miles, the descent is 2500 feet, and a further descent in seventy-five miles is 6000 feet. From here to Sacramento, 104 miles, the line is carried along the edge of precipices, and in places along ledges excavated in the sides of mountains. One of the most imposing of these passages is Cape Horn, 1722 miles from the eastern point of departure.

Over these mountains the Californian stages used to run. American writers have made us acquainted with the wild and adventurous style of coaching in the Western States, and the words "cañons" and "grades" seem quite familiar to us on this side of the Atlantic, owing to the numerous writings of Bret Harte, Mark Twain, and others. The teams are not always confined to four horses, but sometimes consist of six or eight; the whip is quite unlike any English coachman's four-horse whip, but more like the whip used in ranches by stock-drivers; and the harness bears no resemblance to that used by the English Four-in-hand Club.

Charles Dickens, in his "American Notes," gives an amusing description of a drive in an American coach, when in Virginia. He says:

"Soon after nine o'clock we come to Potomac Creek, where we are to land, and then comes the oddest part of the journey. Seven stage-coaches are preparing to carry us on, some of them are ready, some of them are not ready. Some of the drivers are black, some white. There are four horses to each coach, and all the horses, harnessed or unharnessed, are there. The passengers are getting out of the steamboat into the coaches, the luggage is being transferred in noisy wheelbarrows, the horses are frightened and impatient to start; the black drivers

are chattering to them like so many monkeys; the white ones whooping like so many drovers, for the main thing to be done in all kinds of hostlering here is to make as much noise as possible. The coaches are something like French coaches, but nothing like so good. In lieu of springs they are hung on bands of the strongest leather. There is little choice or difference between them; they may be likened to the car portion of the swings at an English fair, roofed, put upon axle-trees and wheels, and curtained with painted canvas. They are covered with mud from the roof to the wheel-tire, and have never been cleaned since they were first built.

“The tickets we received on board the steamboat are marked No. 1, so we belong to coach No. 1. I throw my coat on the box and hoist my wife and her maid inside. It has only one step; that being about a yard from the ground is usually approached by a chair, when there is no chair ladies trust to Providence. The coach holds nine inside, having a seat across from door to door, where we in England put our legs; so that there is only one feat more difficult in the performance than getting in, that is getting out again. There is only one outside passenger, and he sits upon the box; as I am that one, I climb up. And whilst they are strapping the luggage on the roof, and heaping it into a kind of tray behind, I have a good opportunity of looking at the driver.

“He is a negro—very black indeed. He is dressed in a coarse pepper-and-salt suit, excessively patched and darned, especially at the knees, gray stockings, enormous black high-low shoes, and very short trousers. He has two odd gloves, one parti-coloured worsted, and one of leather. He has a very short whip, broken

in the middle, and bandaged up with string. And yet he wears a low-crowned, broad-brimmed black hat, faintly shadowing forth a kind of insane imitation of an English coachman!

"But somebody in authority cries 'Go ahead!' as I am taking these observations. The mail takes the lead in a four-horse waggon, and all the coaches follow in procession, headed by No. 1.

"By the way, whenever an Englishman would cry 'All right!' an American cries 'Go ahead!' which is somewhat expressive of the national character of the two countries.

"The first half-mile of the road is over bridges made of loose planks laid across two parallel poles, which tilt up as the wheels roll over them. The river has a clayey bottom, and is full of holes, so that half a horse is constantly disappearing unexpectedly, and cannot be found again for some time. But we get past even this, and come to the road itself, which is a series of alternate swamps and gravel-pits. A tremendous place is close before us, the black driver rolls his eyes, screws his mouth up very round, and looks straight between the two leaders, as if he were saying, 'We have done this often before, but now I think we shall have a smash.' He takes a rein in each hand, jerks and pulls at both, and dances on the splash-board with both feet (keeping his seat, of course) like the late lamented Ducrow on his two fiery coursers. We come to the spot, sink down in the mire to the coach windows, tilt on one side at an angle of 45°, and stick there. The insides scream dismally, the coach stops, the horses flounder, all the other six coaches stop, and their four-and-twenty horses flounder likewise, but merely for company and in

sympathy with ours. Then the following dialogue occurs :

“ Black driver (to the horses) : ‘ Hi !’

“ Nothing happens, insides scream again.

“ Black driver (to the horses) : ‘ Ho !’

“ Horses plunge and splash the black driver.

“ Gentleman inside (looking out) : ‘ What on earth !’

(Gentleman receives a variety of splashes, and draws his head in again without finishing his question or waiting for an answer.)

“ Black driver (still to the horses) : ‘ Jiddy ! jiddy !’

(Horses pull violently, drag the coach out of the hole, and draw it up a bank, so steep that the black driver's legs fly up into the air, and he goes back amongst the luggage on the roof ; but he immediately recovers himself, and cries, still to the horses) : ‘ Pill !’

“ No effect ; on the contrary, the coach begins to roll back on No. 2, which rolls back upon No. 3, which rolls back upon No. 4 and so on until No. 7 is heard to curse and swear nearly a quarter of a mile behind.

“ Black driver (louder than before) : ‘ Pill !’

“ Horses make another struggle to get up the bank, and again the coach rolls backward.

“ Black driver (louder than before) : ‘ Pe-e-ill !’

“ Horses make a desperate struggle.

“ Black driver (recovering his spirits) : ‘ Hi ! jiddy ! jiddy ! pill !’

“ Horses make another effort.

“ Black driver (with great vigour) : ‘ Alley loo ! hi ! jiddy ! jiddy ! pill ! alley loo !’

“ Horses almost do it.

“ Black driver (with his eyes starting out of his head) : ‘ See dere ! see dere ! hi ! fiddy ! pill ! ally loo ! se—e—e—e !!’

“They run up the bank and go down on the other side at a fearful pace. It is impossible to stop them, and at the bottom there is a deep hole full of water. The coach rolls frightfully; the insides scream; the mud and water fly about us. The black driver dances like a madman. Suddenly we are all right by some extraordinary chance, and stop to breathe.

“A black friend of the black driver is sitting on a fence, the black driver recognises him by twirling his head round and round like a harlequin, rolling his eyes, shrugging his shoulders, and grinning from ear to ear. He stops short and turns to me and says: ‘We shall get you through, Sa, like a fiddle, and hope we please you when we get you through, Sa. Old woman at home, Sa,’ chuckling very much. ‘Outside gentleman, Sa, he often remember old woman at home, Sa,’ to which I replied, ‘Aye, aye, we’ll take care of the old woman at home. Don’t be afraid.’

“And so we do the ten miles or thereabouts in two hours and a half, breaking no bones, though bruising a great many, and in short, getting through the distance ‘like a fiddle.’”

Since everything from the pen of Charles Dickens is so greatly prized by most people, I may be excused for making this digression in order to give his experiences of a Virginia coach, its driver, and the road over which it passed. There are one or two things in what Dickens says that make one suppose he was not very well acquainted with matters relating to driving. The negro driver was driving four horses, yet he takes a rein in each hand—he must then have had four hands; he also dances a jig on the splash-board, which was evidently the foot-board; nevertheless the description of the whole affair is amusing and

instructive, as it gives us an insight into the condition of public conveyances and roads in the Southern States of America; and it is evident that roads as bad as this must have very strongly resembled the old English roads whose history I intend tracing up to the present day. The thing most remarkable about this Virginian road is, that under the circumstances the negro coachman should have driven his coach ten miles in two hours and a half; on such a road as Dickens has described such speed is marvellous. Dickens gives in his "American Notes" another description of a coach ride, but under improved circumstances. He says:

"We remained and rested one day at Cincinnati, and then resumed our journey to Sandusky; our place of destination was in the first instance at Columbus. It is distant about a hundred and twenty miles from Cincinnati, but there is a macadamised road (rare blessing) the whole way, and the rate of travelling upon it is six miles an hour.

"We start at eight o'clock in the morning in a great coach, whose huge red cheeks are so ruddy and plethoric that it appears to be troubled with a tendency of blood to the head; dropsical it certainly is, for it holds a dozen passengers inside, but wonderful to add, it is very clean and bright, being nearly new, and rattles gaily through the streets of Cincinnati.

"Our way lies through a beautiful country richly cultivated, and luxuriant in the promise of an abundant harvest, and, save for certain differences, one might be travelling in Kent.

"We often stop to water the horses at a roadside inn, which is always dull and silent. The coachman

dismounts and fills his bucket, and holds it to his horses' heads. There is scarcely ever any one to help him, there are seldom any loungers standing round, and never any stable folks with jokes to crack. Sometimes when we have changed our team there is a difficulty in starting again, arising out of the prevalent mode of breaking a young horse, which is to catch him, harness him against his will, and put him in a stage-coach without further notice; but we get on somehow or other, after a great many kicks and violent struggles, and jog on as before.

"The frequent change of coachman works no change in the coachman's character, he is always dirty, sullen, and taciturn. If he be capable of smartness of any kind, moral or physical, he has a faculty of concealing it which is truly marvellous. He never speaks to you as you sit beside him on the box, and if you speak to him, he answers (if at all) in monosyllables. He points out nothing on the road, and seldom looks at anything, being to all appearances thoroughly weary of it and of existence generally.

"As to doing the honours of his coach, his business, as I have said, is with the horses; the coach follows because it is attached to them and goes on wheels, not because you are in it. Sometimes towards the end of a long stage he suddenly breaks out into a discordant fragment of an election song, but his face never sings along with him, it is only his voice, and not often that. He always chews, and always spits, and never encumbers himself with a pocket-handkerchief. The consequences to the box passenger—especially when the wind blows towards him—are not agreeable. Whenever the coach stops and you can

hear the voices of the inside passengers, or whenever any bystander addresses them or any one among them, or they address each other, you will hear one phrase repeated over and over again to the most extraordinary extent. It is an ordinary and unpromising phrase enough, but neither more nor less than 'Yes, sir.' But it is adapted to every variety of circumstance, and fills up every pause in the conversation. Thus the time is one o'clock. The scene a place where we are to stay to dine on this journey. The coach drives up to the door of an inn. The day is warm, and there are several idlers lingering about the tavern, and waiting for the public dinner. Amongst them is a stout gentleman in a brown hat swinging himself to and fro in a rocking chair on the pavement.

"As the coach stops, a gentleman in a straw hat looks out of the window.

"*Straw Hat* (to stout gentleman in rocking chair). I reckon that's Judge Jefferson, ain't it?

"*Brown Hat* (still swinging, speaking very slowly and without any emotion whatever). Yes, sir.

"*Straw Hat*. Warm weather, Judge.

"*Brown Hat*. Yes, sir.

"*Straw Hat*. There was a snap of cold last week.

"*Brown Hat*. Yes, sir.

"*Straw Hat*. Yes, sir.

"A pause, they look at each other very seriously.

"*Straw Hat*. I calculate you'll have got through that case of the corporation, Judge, by this time, now.

"*Brown Hat*. Yes, sir.

"*Straw Hat*. How did the verdict go, sir?

"*Brown Hat*. For the defendant, sir.

"*Straw Hat* (interrogatively). Yes, sir?

"*Brown Hat* (affirmatively). Yes, sir!

"*Both* (musingly as each gazes down the street).
Yes, sir.

"Another pause; they look at each other again, still more seriously than before.

"*Brown Hat*. This coach is rather behind time to-day, I guess.

"*Straw Hat* (doubtingly). Yes, sir.

"*Brown Hat* (looking at his watch). Yes, sir.
Nigh upon two hours.

"*Straw Hat* (raising his eyebrows in very great surprise). Yes, sir?

"*Brown Hat* (decisively as he puts up his watch).
Yes, sir.

"*All the other inside Passengers* (among themselves).
Yes, sir.

"*Coachman* (in a very surly tone). No, it ain't.

"The conversational powers of the company had by this time been pretty heavily taxed. Then we all alight and have dinner, and resume our journey, which continues through the same kind of country until evening, when we come to the town where we are to stop for tea and supper; and having delivered the mail-bags at the post office, ride through the usual wide streets, lined with the usual stores and houses (the drapers always having hung up at their door a piece of red cloth by way of a sign), to the hotel where this meal is prepared. There being many boarders here, we sit down a large party, and a very melancholy one as usual. But there is a buxom hostess at the head of the table, and opposite a simple Welsh schoolmaster with wife and child, who came here on speculation of greater promise than performance, to teach the classics; and they are

sufficient subjects of interest until the meal is over and we resume our journey.

“It was well for us that we were in this humour ; for the road we went over that day was certainly enough to have shaken tempers that were not resolutely at set fair down to some inches below stormy. At one time we were all flung together in a heap at the bottom of the coach ; at another we were crushing our heads against the roof. Now one side was deep in the mire, and we were holding on to the other ; now the coach was laying on to the tails of the two wheelers, and now it was rearing up in the air in a frantic state with all four horses standing on the top of an unsurmountable eminence, looking coolly back at us, as they would say, ‘unharness us, it can’t be done.’ The drivers on these roads certainly get over the ground in a manner that is quite miraculous—so twist the teams about in forcing a passage, corkscrew fashion, through the swamps and bogs, that it is quite a common circumstance, on looking out of the window, to see the coachman, with the end of a pair of reins in his hands, apparently driving nothing and playing at horses, and the leaders staring at one unexpectedly from the back of the coach as if they had some idea of getting up behind. A great portion of the way was over what is called a corduroy road, which is made by throwing the trunks of trees into a marsh and leaving them to settle there. The very slightest of the jolts with which the ponderous carriage fell from log to log was enough, it seemed, to dislocate all the bones in the human body. It would have been impossible to experience a similar set of sensations in any other circumstances, unless perhaps in attempting to get up

to the top of St. Paul's in an omnibus. Never, never once that day was that coach in any position, attitude, and kind of motion to which we are accustomed in coaches. Never did it make the smallest approach to one's experience of the proceedings of any kind of vehicle that goes on wheels."

This completes our greatest English novelist's—or rather humorous novelist's—description of American coaching. One can scarcely dignify it with the term "description," since it deals with so much that taxes our faith. What coach could possibly remain right side up that experienced such extraordinary contortions? and what harness ever yet made allowed of horses vanishing from sight or following behind the coach to which they were harnessed, presumably with the intention of mounting up behind? And, after all this long description, do we realise the true condition of these roads and their mode of construction, or can we be supposed to understand the description of vehicle in which Dickens made these singular journeys?

"The next day," he continues, "there being no stage-coach upon the road we wished to take, I hired 'an extra,' at a reasonable charge, to carry us to Tiffin, a small town from whence there is a railway to Sandusky. This was an ordinary four-horse stage-coach, such as I have described, changing horses and drivers as the stage-coach would, but was exclusively our own for the journey. To ensure our having our horses at the proper stations, and being incommoded by no strangers, the proprietors sent an agent on the box who was to accompany us the whole way through;

and thus attended, and bearing with us besides a hamper full of savoury cold meats, and fruit and wine, we started off again in high spirits at half-past six o'clock next morning, very much delighted to be by ourselves, and disposed to enjoy even the roughest journey."

In the heavily-timbered districts of Canada and the United States corduroy roads are very common ; but they are more intended for waggons than for coach and passenger traffic. They consist of straight logs of timber, either round or split ; but they scarcely deserve the name of roads, and are more often called tracks. They are, nevertheless, vastly superior to a soft marsh or swamp. They are called corduroy roads through their ribbed character. The logs are all cut to the required width of the road, which is fifteen or sixteen feet. It is customary to level up between the logs with pieces of the same length split to a triangular cross-section. These are inserted, with the edges downwards, in the open joints so as to bring their top surfaces even with the upper sides of the large logs, or as nearly so as practicable. Upon the bed thus prepared a layer of brushwood is laid. With a few inches of soil or turf to keep it in place, this completes the road.

Dickens evidently travelled on a road to which sufficient attention had not been given, either in construction or maintenance, to judge by the description of his sufferings.

But to return to our subject. In England there is one circumstance which may affect the condition and importance of common roads, that is the agricultural depression throughout the British Isles. This, of course, influences greatly the land-

owners who contribute so largely to the rates ; besides which, it is an undisputed fact that the poorer inhabitants of rural districts are year by year either emigrating to the Colonies or flocking to the great centres of labour and industry in search of work. I believe that not only amongst the poor, but also with the rich, there is a general inclination toward residence in towns. The country is becoming year by year regarded more as a playground or place of relaxation and leisure to the workers in commercial centres, and this is of course owing to the speed and facility of railway travelling. In the old days, before the advent of the locomotive, a residence in the country was a fixed one, there being no possible means of running to and from London as there is at the present time ; consequently those who lived in the country had their interest centred in the country, with little possibility of escaping from it except they undertook a long and tedious journey. I have no doubt that in those days there was more neighbourly feeling existing amongst country communities, and greater efforts were doubtless made to provide amusement and occupation ; besides which, sport must have been far better in those days than now. Country folks are in some measure envied for three months in the year, and pitied for the remaining nine months. In fact, some Londoners seem to regard those who reside in the country with a feeling of positive condolence and sympathy, except it be that they inherit a fine family property, or seek the country for a time only in pursuit of sport ; but a residence, unaccompanied by a predominating and comprehensible attraction, appears to them to be a condition calling for their pity and commiseration ; and it is

to a certain extent the spread of this feeling that urges heads of families to take up their residence in town, whereby the country districts are made to suffer, as year by year more money is spent in London and abroad, and less amidst the agricultural population of Great Britain, and the treasuries of the various parishes suffers in consequence. In fact, it is only necessary to take one street or square, in a fashionable part of London, to understand how, if all the residents therein lived in one of the smaller English counties, they would more than equal the wealth and influence to be found there. In Belgravia and Mayfair rank would probably be added to wealth, and probably there would be a greater amount of wealth and rank in a London street or square than in the whole of an English county, as very frequently three or four peers and half-a-dozen fairly large landowners represent the entire wealth of a county. When passing through square after square and street after street in London, and noticing the evidences of wealth that are everywhere manifested, and noticing how in every direction London is extending, not only in consequence of the erection of small dwellings suited to the middle and poorer classes, but also by streets and squares of mansions that require a large income to maintain, and more than equal in size many well-known country houses, one cannot but feel that the wealth of England is becoming diverted from the rural districts and is gradually becoming absorbed by the metropolis and its immediate suburbs. There are exceptions to this rule; but they are every day becoming less frequent.

The time when rural parishes reap most benefit by the wealth of some one of their inhabitants is when

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some wealthy manufacturer or man who has made a large fortune in trade, builds a big house and establishes himself in their midst, which circumstance naturally creates a demand for labour hitherto unknown, and a proportionate amount of money is frequently expended in contributing to the highway and other rates.

This at times has a marked influence on the condition of the roads and other things tending to the comfort and convenience of the old and long-established country-life residents, who, notwithstanding that they sometimes occupy important positions, are so Conservative in their principles and so sluggish in their dispositions, that they are quite content that things should remain as they ever have been within their recollection. But a man who has spent all his life in mental or physical activity, when suddenly transported to a region where the *dolce far niente* system is in vogue, feels compelled for the sake of his own peace of mind to stir up his neighbours into some semblance of activity and industry ; frequently, I admit, he does harm, but as often he does good. If he is wealthy he contributes to the restoration of the church ; he becomes a guardian for the parish ; he advocates improved dwellings for the labouring classes ; and last, but not least, he persuades an unwilling and indolent Highway Board to improve the condition of the high-roads and all appertaining thereto. And in doing this he performs what is an herculean feat, since the parochial magnates who are supposed to exercise control over the highways are not only ignorant of the business they are called upon to perform, but their opinions are so fixed and unalterable that no ordinary amount of persuasion

will influence their judgment, or induce them to take an enlightened and intelligent view of the situation.

Among modern nations, France is one of the most distinguished for her early attention to establishing numerous roads. The following account of her roads is taken from Peuchet's "Statistical Account of France":

"The origin of our principal roads is generally attributed to Philip Augustus; it was under his reign, and by his orders, that the city of Paris began to be paved.

"Sully took great interest in the improvement of the roads. He first introduced the practice of planting trees on the sides of them, and established regular funds for their repair. Colbert neglected nothing to advance the extension of roads throughout France; and M. Desmartis, who succeeded him, caused the road from Paris to Orleans to be made. He was the founder of the Corps of Engineers, appointed to superintend the works belonging to the roads. Under the administration of the Duke de Noailles, the roads were improved and carried through the provinces.

"In 1726, the Department of the Ponts et Chaussées fell into great disorder, and was in want of sufficient funds; but the Director-General, the brother of the celebrated Cardinal Dubois, recommenced the repairs of them, and continued them with great regularity.

"Under the administration of M. de Trudaine, in 1787, a number of new roads were made. He established the École des Ponts et Chaussées, under M. Perronet, as Chief Engineer, and at his death he left to this school his manuscripts and library. This school is under the Minister of the Home Department;

the scholars are fifty in number. These are selected from the Polytechnic School, and receive an allowance of seventy-five francs a month.

“The roads of France were divided at this time into four classes, according to their importance and the breadth that is given to them. The first class comprised the great roads which traverse the whole of France, from Paris to the principal cities and the ports; the second class, the roads between the provinces and principal cities; the third class, the roads between the principal towns in the same province and the neighbouring provinces; and the fourth class, the roads between small towns and villages.

“By an Order of Council of the 6th of February, 1776, the breadth of the first class was fixed at forty-two feet (French) between the fences; of the second at thirty-six feet; of the third at thirty feet; and of the fourth at twenty-four feet.

“The roads have since been divided into three classes, not according to their breadth but their direction.”—(Peuchet, p. 458.) All the principal roads of France are under the management of Government. The Department of the Ponts et Chaussées has the care of them. In the year 1836, the sum of £896,000 was granted by the Chambers for maintaining them.

“Sir Henry Parnell, in his treatise on roads, published in 1838, remarks that, in Spain, the *Caminos Reales*, or King's Highways, are not numerous, nor are they kept in good repair. Taking Madrid as a point of departure there are two good roads to Burgos; one passing through Valladolid, and the other through Aranda de Duero. From Burgos, the road is continued by Vittoria and Irun to France. Both

these roads are in tolerable repair. From Valladolid a good road has been made by Valentia and Regnosa to Santander. There are two good roads to Bilboa ; one by Miranda, the other by Vittoria.

“To the northward there is a *Camino Reale*, through Gallicia to Corunna and Ferroe, but in such want of repair as to be almost impassable in numerous places for loaded carriages ; attempts are, however, now making to improve it. In Catalonia the roads are comparatively numerous and good. The road from Saragosa to Barcelona has lately been put in repair, and a diligence was established upon it in the beginning of the year 1831.

“The other roads which are traced upon maps of Spain may be divided into three classes.

“Firstly, roads which have originally been made and covered with road metal ; secondly, roads across the plains and through the valleys formed by the tracks of the country carts, and which have only in a few places been artificially constructed ; and, thirdly, the mule roads, or paths worn by the feet of the mules travelling over the mountains during a long series of years.

“The revenue applicable to the construction and repair of the roads is derived, firstly, from toll-gates, and, secondly, from local taxes. Upon all the practicable roads tolls are established at intervals of ten or twelve English miles. (See *Foreign Quarterly Review*.)

“About £90,000 is the average annual expenditure upon the roads in Spain. In the most populous districts of the German and Russian dominions there are to be found paved roads similar to those in France. The roads in Holland are generally carried in un-

deviating straight lines along that low and flat country, between a double row of trees, with a ditch on either side. The Dutch take great pains in preparing a firm foundation for their roads, which are there built with bricks called clinkers, laid in lime, their longest direction being across the road. The Swedes have long had the character of being excellent road engineers. Good rock is very generally met with in Sweden, and they spare no pains in breaking it into small pieces. Their roads are spacious and smooth. Where the country has been opened in Russia the roads are formed on scientific principles ; but there are few of them. In the United States of America the roads have been much improved. The principal roads are similar to those in England, so far as regards construction and maintenance. Italy still preserves its celebrity for internal communication.

“Before the peace of 1814, there was but one great road throughout Prussia, namely, that between Berlin and Magdeburgh, a distance of thirty leagues ; the rest were in those days scarcely passable, and were in a most disgraceful condition. There are now a number of great roads connecting Berlin with various parts of the kingdom, maintained in excellent order, mostly at the expense of the Government, and a few at the expense of local authorities and land owners. In the towns and villages through which these roads pass, the pavement is generally in a very bad state, the expense being incurred by the municipal authorities, who are very independent, and not easily induced to repair them.” The above remarks are taken from the *Foreign Quarterly Review*.

But to return to the subject of English roads ; they were made a matter for legislation in England as

early as 1346. Edward III. authorised a toll to be levied for the repair of the road leading from St. Giles in the Fields to the village of Charing, and from the same quarter to Temple Bar, down Drury Lane. The roads further west were so bad, that when the King went to Parliament, faggots were thrown down over which the royal cavalcade passed.

Even as late as the reign of Elizabeth and James I., travelling was continued with difficulty. The great west road out of London was in an intolerable state, and at Knightsbridge coaches and waggons very frequently stuck hard and fast in the mud. Further from London the roads were mere rough tracks, consequently the general mode of travelling was on horseback or on foot, poor people walked and rich people rode; judges and barristers rode circuit. For a long time after this nothing but waggons were used on the highways.

The great main road through Wales to Holyhead was in such a condition that, in 1685, the Earl of Clarendon, who was then Viceroy of Ireland, was five hours in travelling fourteen miles from St. Asaph to Conway; between Conway and Bangor he was forced to walk and the Countess was carried in a litter; his carriage was brought after him somehow by the help of some farm labourers. Carriages were frequently taken to pieces at Conway and carried by the Welsh peasantry to the Menai Straits. Roads were before made a matter for legislation in England in the time of Queen Mary, when a law was enacted that in every parish there should be two road surveyors, and the inhabitants of all such parishes should provide labourers and tools for four days of each year to work on the roads under the direction of these surveyors. This law

continued in operation until the reign of Charles II., when, owing to the increased traffic particularly about London, the enactment of some new law was necessary, and so from this time tolls were imposed on all persons making use of the highway; but, though the law relating to tolls was in existence, it did not come into positive effect until 1767, when it included all the great highways throughout the kingdom, whilst Mary's Act, as to the supply of labour, applied only to the cross or by-roads.

Macaulay writes that the death of Queen Elizabeth was not known in remote parts of Devonshire until the greater number of Englishmen had left off their mourning for her.

The little attention that was paid in former times to the roads of England, is made evident by a proclamation of Charles I., issued in 1629, confirming one of his father's, issued in the twentieth year of his reign, for the preservation of the roads of England, which commands: "That no carrier or other person whatsoever shall travel with any wain, cart, or carriage with more than two wheels, nor above the weight of twenty hundred, nor shall draw any wain, cart, or carriage with more than five horses at once."

The following description of roads is taken from MacCulloch's "Dictionary of Commerce:—"

"It is not easy for those accustomed to travel along the smooth and level roads by which every part of the country is now intersected, to form an accurate idea of the difficulties the traveller had to encounter a century ago. Roads were then hardly formed, and in summer not unfrequently consisted of the bottom of rivulets. Down to the middle of the last century, goods were carried on horseback. The men who

owned these pack-horses were called carriers, hence the origin of the name carrier, to carry. This more especially referred to those men who owned carts, which were employed when the load a horse could bear on his pack was not sufficient to compensate them for the trouble and expense of a lengthened journey. A carrier going from Selkirk to Edinburgh, a distance of thirty-eight miles, required two weeks to accomplish the distance both ways.

“ In 1678, an agreement was made to run a coach between Edinburgh and Glasgow, a distance of forty-one miles, which was to be drawn by six horses, and to perform the journey there and back again in six days.”

In the good old times, the difficulties attending commercial enterprise and social intercourse arose in a great measure from the want of good roads ; it prevented the interchange of news and the sale or purchase of agricultural or household commodities, and even when the population immensely increased, the progress made in road construction and maintenance was very slow. Goods had to be carried on pack-horses throughout most parts of England ; the price of grain and other agricultural produce was thus affected, as in some districts they suffered from a scarcity, whilst in other places they had more than they required, and had no means of disposing of them. I read the other day that this inconvenience, when no longer felt in England, was still experienced to such an extent in Spain, where the people are naturally of a sluggish disposition, that those living on the sea-coast until lately actually preferred to get their supplies from the Baltic rather than from the interior of their own country.

Shakespeare speaks of pack-horses when, in

Richard III., he makes Glo'ster say to Queen Margaret :

Ere you were Queen, ay, or your husband King,
I was a pack-horse in his great affairs.

Pack-horses are made use of to this day in all mountainous countries, and in all countries that are unprovided with roads suitable for the passage of wheeled vehicles.

In many parts of Poland and Hungary, distant from commercial centres or water communication, the value of the crops was, until lately, seriously diminished by the condition of the roads.

It would be very wearisome were I to make reference to the various Acts which have been passed by Parliament relating to roads, particularly as writers contradict one another.

Pepys, in his diary (written in the reign of Charles II.), speaks frequently of journeys undertaken by himself and others. On the 26th of August, 1663, he says :

"To Whitehall, where the court full of waggons and horses, the King and Court going this day out toward Bath." Then, again, he speaks of a journey he undertook, with his wife and maid-servant, to Oxford, Salisbury, Bath, and Bristol, riding some part of the way, and driving when possible. When riding, it is evident that the women rode pillion—that is, behind the men. He also speaks of Lady Castlemaine, when in town, calling her coach at a quarter of an hour's notice, and going off to Richmond. On the 25th of January, 1665, he says: "With our coach of four horses to Windsor, and so to Cranborne." Now, Cranborne is in Dorsetshire, and is distant ninety-three miles from London. On the 26th he journeys to

Windsor, and stays at an inn called "The Garter," and then returns to London. At another time Mr. Pepys says: "Up early and to Petersfield, and thence got a countryman to guide us to Havant, and then on to Portsmouth, where there was my Lord Ormond and Manchester, and much London company; and then over to Gosport, and so rode to Southampton, and the next day back to Portsmouth, and so on to Petersfield, and from there to London."

The way this old gentleman journeys about does not incline us to think that the roads were as bad, or the country as dangerous and inaccessible, as has been represented by modern writers. Evelyn, too, in his diary, speaks of making numerous journeys, and mentions no difficulty in doing so.

Evelyn's diary is written in far better English than Pepys', and he expresses himself much more clearly and better. Pepys' diary always gives one the impression of a person who lived a great while ago, and who, even for the time in which he lived, was rather behind his contemporaries and equals in point of culture and education; whereas Evelyn's diary might almost have been written at the present day, and was evidently the work of a man of great refinement and careful education. It is an unfortunate thing that there are no such diaries written at other times, or, if written, not preserved. There is no saying what the value may not be, in times to come, of a good diary, written by a person of education and intelligence. Those who are best qualified to perform such a task are frequently too lazy to put it into practice.

For some time only waggonns were in use on the roads, and it was in these cumbersome vehicles that passengers were compelled to travel.

The first proper stage-coach was the Coventry

coach, as early as 1659, but stage-coaches were run from London to Dover by way of the old Roman road, Watling Street. Coaches were then advertised to start, "God willing," and "about such and such an hour, as may seem good to the majority of the passengers."

Consequently, travelling in those days was a very deliberate matter. In the year 1700 it took a week to go from London to York, two days to go from London to Salisbury and Oxford, and five days to reach Exeter; and it took two days to reach Tunbridge Wells, which is now only an hour from Charing Cross.

In past times the state of the roads deprived our own poor in some of the midland counties of England of most of the conveniences of life, especially fuel, as when the extended cultivation had destroyed the forests it was only those who were in close proximity to collieries or peat moors who had anything to burn.

Even a century and a half ago—1737—travelling in carriages except on main roads or near big towns, was almost impossible in winter; and when wealthy persons travelled from one part of the country to another, they had to have additional horses attached to their carriages to pull them through the mud, and sometimes men with spades and pickaxes to clear and prepare the road or dig them out.

Post-carriages, even on the high-roads, never used to travel at a greater speed than five miles an hour, until mail-coaches were advertised to run at the rate of seven miles, which in those days was considered a marvellous performance. Even at this rate, it took a little over four days to go from London to York.

Even the roads about London were in a terrible state, and it was not until mail-coaches were better horsed and better built and a spirit of competition was

aroused, that the high-roads really began to approach their present condition.

As late as the middle of the last century, it took a day and a half for the stage-coach to travel from Edinburgh to Glasgow.

Mr. Chambers says, in his paper called the *Estimate*: "Turnpikes, which were first introduced after the Restoration of Charles II., were erected slowly in opposition to the people. The Act which made it felony at the commencement of George the Second's reign to pull down a toll-gate was continued as a perpetual law. Yet the great roads of England remained in their abominable condition even as late as 1752 or 1754, when a traveller seldom saw a turnpike after leaving London or its vicinity, and yet 452 Turnpike Acts were passed between 1760 and 1774; and since then, from

1785 to 1792, 302 Acts were passed;

1792 to 1800, 341 " "

1800 to 1809, 419 " "

Every year since 1809, turnpike roads increased until they covered 23,000 miles in England alone; now the roads are being freed, and the various parishes through which they pass are forced to maintain them. With regard to the route taken by turnpike roads before being properly constructed, they in many instances followed the direction taken by the earliest inhabitants of the country; these foot-paths became in time bridle-paths, and at last these tracks became so fixed and unalterable owing to long custom, and were consequently so improved, as to become highways suitable for wheeled vehicles."

Sir Henry Parnell complains that there was no work published on roads in his time, but this defect has been since remedied, as there are now several books treating on the subject.

Parnell was an Honorary Member of the Institution of Civil Engineers. Mogg refers to him in his edition of Colonel Paterson's road-book, and I believe Parnell was in some way connected with that department of the Government which dealt with turnpike roads. He was Member of Parliament for Queen's County, Ireland, and afterwards for Dundee, in Scotland; by his exertions he carried the Holyhead Road Bill through Parliament, and was appointed one of the commissioners. Sir Henry Parnell was afterwards created Lord Congleton, and died 1842.

Lord Daer, eldest son of the Earl of Selkirk, about the year 1790 introduced into Scotland the practice of laying out roads with a spirit-level. The road from Dumfries to Castle Douglas was laid out by him so as to have no greater inclination than 1 in 40, although passing through a very hilly country. Mr. Abercomby, too, a gentleman by birth, pursued as a profession the business of road-making. He laid out the road between Kinross and Perth, and by following the valleys obtained excellent levels; he also laid out the road from Perth to Dunkeld. On all occasions he made it his rule never to ascend a single foot unless absolutely unavoidable, and this he accomplished by following the valleys and cutting through high banks, and filling up hollows. Mr. Abercomby made all his road surfaces with stone broken very small. The practice had long existed in Scotland, and is recommended by old French writers on road construction long before the existence of MacAdam.

In Ireland the abolition of the statute labour in 1763, and placing the business of road-making under the jurisdiction of the grand juries, immediately led to improvement; the general result was the establishment of excellent roads throughout Ireland, which

are maintained to the present day, notwithstanding the great poverty that exists amongst its inhabitants.

Arthur Young, in his "Tour in Ireland," says : "For a country so far behind England in other respects to be so far before us in the matter of roads, cannot fail to impress the English traveller." He goes on to say, "that no matter where he determined to go during his tour, everywhere he found perfect roads."

Telford, the engineer, as I have elsewhere observed, made 920 miles of roads and 1117 bridges in the Highlands of Scotland. In Scotland that was a matter of some difficulty, as the labour did not consist merely in making the roads, but protecting them after they were made from swollen torrents, and providing proper drainage to enable them to be easily freed of water that encroached upon their surface.

In the districts between Glasgow and Carlisle, upwards of 150 miles of Lowland roads were made by Telford. But it was in 1815 that he especially distinguished himself, by making the great Holyhead road, thus making an important line of communication between London and Dublin. He made a foundation of rough stone pavement, upon which he laid the road surface.

Telford, in speaking of this road himself, says : "I was directed to make a survey of it in 1810, it having been satisfactorily proved to successive committees of the House of Commons, that the inhabitants of the country through which the road passed did not possess sufficient funds for effecting any essential improvements; an Act of Parliament was therefore passed, empowering commissioners therein named to expend the sum of £20,000 in making such alterations as might be deemed expedient."

This certainly was not a very large sum for the road, if, as has been proved, £1000 per mile is the cost of constructing a turnpike road, but Telford goes on to say that "under the power of this Act the commissioners commenced operations in the autumn of 1815, and further grants were made from time to time."

As the road when finished was most excellent, it was essential that it should be kept in good order and repair; consequently, over separate districts, assistant surveyors were appointed, care being taken to select them from practical workmen of long experience. Under these inspectors a working foreman was placed on every four or five miles of road, with a sufficient number of labourers in his charge. These men were employed by task and piece work in quarrying rock, gathering stones in the fields, getting gravel, breaking stones, scraping the road, loading material into carts, and all works that were reducible to measure, or could be estimated by the piece. The duties of the general surveyor and clerk on the Holyhead road were to go along the road every four weeks, the surveyor to examine the practical operations, and settle accounts with each sub-inspector, and give the clerk a certificate showing the money due; the clerk to collect the tolls at the toll-houses, and to pay every one what he ascertained from the surveyor was properly owing, and lodge the balance of his receipts with the treasurers, who lived at Shrewsbury.

I here introduce a return of the expenses of constructing the Holyhead road, which I found lying loose amongst some papers connected with road-making, formerly in the possession of the general surveyor of the Isle of Wight roads. These papers give some idea of the cost of a great high-road; they are dated 1839, one year after the publication of Sir Henry

Parnell's "Treatise on Roads." Sir Henry Parnell, as I have before remarked, rendered very great services to his country by his advocacy of good roads. His treatise on roads is one of the best ever written.

In a journey between London and Edinburgh in the year 1763 a fortnight was occupied, besides which, no regular coach started except once a month. Of course the roads were beset with highwaymen. In those days the people in one part of Great Britain knew very little about those occupying another part; the South of England to North countrymen was like a foreign country, and *vice versâ*, so also were the East and West; the people were frequently unacquainted with anything beyond their own parish, the only news which reached them was communicated to them by travellers and pedlars; a letter received at the big house or at the parsonage had its news retailed throughout the village and the surrounding neighbourhood.

Fairs were in past times naturally held to be of very great importance, owing to the imperfect communication. Amongst the very first was Winchester. The merchants of London used to travel to these fairs, bringing with them all manner of valuable goods. The great fair at Winchester attracted merchants from all parts of Europe; it took place on St. Giles' Hill, and it was divided into streets of booths, named after the merchants of the various countries, where they exposed their goods.

Wey Hill Fair, near Andover, was another great fair, and this is still continued, though not so important as formerly.

On the 2nd of September, 1789, George IV., then Prince of Wales, was leaving Wentworth, where he

HOLYHEAD ROAD.

A RETURN

OF THE EXPENSE INCURRED IN CUTTING THROUGH HILLS,
AND SIMILAR IMPROVEMENTS ON THE HOLYHEAD LINE
OF ROAD.

[To face page 56.]

HOLYHEAD ROAD.

Return to an Order of the Honourable The House of Commons, dated 20 February, 1839 ;—*for*,

A RETURN of the EXPENSE incurred in cutting through HILLS, and similar Improvements on the HOLYHEAD LINE of ROAD.

RETURN of the EXPENSES of the Improvement of the Road from *London* to *Holyhead*, distinguishing the Portion of such Expenses granted by Parliament, and not to be repaid, and the Portion advanced on Loan, and repaid, or in course of Repayment.

THROUGH NORTH WALES.			£	s.	d.
DEFRAID BY GRANTS OF PARLIAMENT, NOT TO BE REPAID.					
For the improvement of the road from Gobowen to the Menai bridge, including the building of an iron bridge over the river Conway, and other bridges			127,904	7	2
Additional works, repairs, land, and damages			19,180	9	2
For the improvement of the road from Chester to Bangor :					
Amount of contracts for road-making			14,664	5	10
Additional works, repairs, land, and damages			2,740	5	7
			147,084	16	4
			17,404	11	5
TOTAL			164,489	7	9
DEFRAID BY LOANS, TO BE REPAID.					
Amount expended in building the Menai bridge, and purchase of the ferry, and making 21 miles of new road across the island of Anglesey, and also three miles of branch roads, and the embankment at the Stanley sands			272,766	19	3
Additional works, repairs, bridge-keeper's wages, &c.			6,539	13	1
			279,306	12	4
Amount expended in building the Conway bridge, and purchase of the ferry			58,001	14	5
Repairs, bridge-keeper's wages, &c.			2,666	16	6
			60,668	10	11
TOTAL			339,975	3	3

FROM LONDON TO NORTH WALES.

DEFRAID BY LOANS, TO BE REPAID.

For improvements on the Highgate-archway road :

Amount of contracts for new forming road, constructing side and cross drains, making foot-paths, laying a cement bottoming along the centre of the road, and coating the same with Guernsey granite 7,966 11 9
 Additional works, Guernsey granite, Hartzhill stone, and gravel for new coating the road, scraping and keeping in repair the whole road, from September, 1829, to November, 1833, law charges, inspection, &c. 6,513 9 8

For improvements within the St. Alban's and South Mims Trust :

Amount of contracts for making five miles and 170 yards of new road, including bridges, drains, and fences 13,036 15 0
 Additional works, repairs, land, damages, law charges, charges for awards and valuations of land, &c. 29,253 16 3

For improvements within the Dunstable Trust :

Amount of contracts for road-making 2,600 0 0
 Land, damages, law charges, inspection, &c. 435 1 10

For improvements within the Puddle-hill Trust :

Amount of contracts for road-making 7,235 5 2
 Law charges, inspection, &c. 194 7 7

For improvements within the Hockliffe and Stratford Trust :

Amount of contracts for road-making 17,537 12 6
 Additional works, repairs, land, damages, law charges, inspection, &c. 3,368 3 6

For improvements within the Stratford and Dunchurch Trust :

Amount of contracts for road-making 22,518 17 2
 Ditto paid to the Trustees for road-making 8,400 0 0
 Additional works, repairs, land, damages, law charges, inspection, &c. 7,162 6 8

For improvements within the Dunchurch and Stonebridge Trust :

Amount of contracts for road-making 20,409 0 6
 Additional works, repairs, land, damages, law charges, inspection, &c. 9,457 18 10

Carried forward

£	s.	d.	£	s.	d.
7,966	11	9			
6,513	9	8	14,480	1	5
13,036	15	0			
29,253	16	3	42,290	11	3
2,600	0	0			
435	1	10	3,053	1	10
7,235	5	2			
194	7	7	7,429	12	9
17,537	12	6			
3,368	3	6	20,905	16	0
22,518	17	2			
8,400	0	0			
7,162	6	8	38,081	3	10
20,409	0	6			
9,457	18	10	29,866	19	4
			£156,107	6	5

EXPENSES OF IMPROVEMENT OF THE ROAD FROM LONDON TO HOLYHEAD.

	£	s.	d.	£	s.	d.
For improvements within the Bilston Trust :						
Amount of contracts for road-making						156,107 6 5
Additional works, repairs, land, and damages				3,400 7 6		
				2,122 18 2		
For improvements within the Wolverhampton Trust :						5,523 5 8
Amount of contracts for road-making				6,736 13 7		
Additional works, repairs, land, houses, and damages				7,744 2 6		
For improvements within the Shifnal District of the Watling-street Trust :						14,480 16 1
Amount of contracts for road-making				7,176 6 8		
Additional works, repairs, land, houses, and damages				4,546 9 0		
For improvements within the Wellington District of the Watling-street Trust :						11,722 15 8
Amount of contracts for road-making				1,215 7 6		
Additional works, repairs, land, and damages				708 4 4		
For improvements on the Shrewsbury and Oswestry road :						1,923 11 10
Amount of contracts for road-making				3,090 0 0		
Land, damages, law charges, inspection, &c.				651 8 1		
TOTAL Expense from London to North Wales						3,741 8 1
						<u>£193,499 3 9</u>

Of the above Sums of £339,975 3s. 3d., and £193,499 3s. 9d., making together £533,474 7s., there has been repaid on account of Loans advanced the following Amounts ; viz.

	PRINCIPAL.			INTEREST.			TOTAL.		
	£	s.	d.	£	s.	d.	£	s.	d.
Menai and Conway bridges.									
Exchequer Bill Loan Commissioners									
Consolidated Fund									
	45,330	6	3	16,453	5	4	142,362	19	3
	27,769	3	1½	18,964	11	9½	61,783	11	7
							46,733	14	11½
TOTAL Amount repaid							<u>£250,880</u>	<u>5</u>	<u>9½</u>

DUNCANNON, } *Commissioners of Her Majesty's*
B. C. STEPHENSON, } *Woods, Forests, Land Revenues,*
A. MILNE, } *Works, and Buildings.*

OFFICE OF WOODS, &c.
24 April, 1839.

had been staying with Lord Fitzwilliam, when his coach capsized in a narrow part of the road ; it rolled down a bank, turned over three or four times, and landed in a field, where it was smashed to pieces ; it is said that the Prince escaped unhurt. This, like the circumstance of a railway director being injured in a railway accident, did more than anything else to improve the condition of the roads.

When the turnpike system was first established, it met with violent opposition ; bodies of armed men used to meet and burn down the toll-houses, take the gates off their hinges, and blow up the gate-posts with gunpowder. The greatest resistance was experienced in Yorkshire ; soldiers were assembled to protect the turnpikes, but when one was left unprotected it was immediately destroyed. Petitions were presented to Parliament against the extension of the turnpike system, but without avail. From 1760 to 1774, 452 Acts were passed for making and maintaining highways.

As regards turnpikes, they are an intolerable nuisance to any one who journeys on the high-road ; at the same time there is a certain amount of rough justice in the imposition of turnpike tolls, since those who use the roads should assuredly pay for them, and it is rather hard to ask those who only walk along a country road, and never ride or drive, to contribute to their maintenance.

One of the most remarkable road-makers who ever lived was the blind man, John Metcalf. He was born at Knaresborough, a market-town in the West Riding of Yorkshire. The town is beautifully situated on the north-east side of the River Nidd, the waters of which are made to turn the wheels in connection with linen factories. About a mile down the river are the

ruins of a priory, founded by Richard, brother of Henry III., and here there is a cavern known as St. Robert's Cave, where Eugene Aram—now so well known, owing to Lord Lytton's famous novel—committed the murder in 1745, of which he was, fifteen years afterwards, convicted.

Metcalf lost his sight when only six years of age from an attack of small-pox. He was in later years a great horseman, and used even to follow the hounds; he knew his way all over the country within many miles of his home. He is said to have constantly ridden races, and was also an excellent horse-dealer. He used to gain a knowledge of the shape of the horses he purchased by his extremely delicate and susceptible touch; he would also judge of their soundness by ear, as when they were trotted or walked past him, he very quickly detected any inequality in their tread. Both of these means of judging of a horse's soundness are to be commended even to persons having the use of both eyes, since when the eye cannot detect, the touch or hearing may frequently do so. Metcalf was a proficient in many games which one would suppose would require the use of both eyes. Besides, he was a good violinist; in fact, he performed feats that required skill, courage, and activity, which would have intimidated many men who were possessed of perfect eyesight. Perhaps one of the most remarkable of his qualities was his wonderful ability for finding his way on strange roads, and actually taking a survey of the country when about to construct a new road; and yet he never encountered any molestation, and was never robbed or ill-treated in the course of his travels.

To give some idea of the rate at which coaches

travelled in those days, about 1740, it is only necessary to say that Metcalf once paid a visit to a Colonel Liddell at Ravensworth Castle. He met this gentleman in London when about to start for Harrogate, in Yorkshire. The Colonel offered him a seat in his coach; Metcalf thanked him, but declined the offer, observing that he could walk as far in a day as the Colonel could drive in his carriage; and he did not say so without reason, since he walked two hundred miles over an unknown road in less time than it took the Colonel's coach drawn by four post-horses; he arrived at Harrogate before the carriage, and that without hurrying himself by the way. The story is even told of a man with a wooden leg who, when asked by a stage-coachman in those days whether he should give him a lift, replied, "No, thank you, I am in a hurry," and stumped on far ahead of the coach, which arrived at its destination long after the lame man had had his supper and gone to bed.

Shortly after the battle of Preston Pans, October, 1745, Metcalf enlisted as a soldier with the Duke of Cumberland's army. After the defeat of the Pretender, the regiment to which he belonged was disbanded; Metcalf then became a carrier between York and Knaresborough, at which latter place he was born. His stage-waggon was the first that plied on that road; he made the journey twice a week in summer, and once in winter.

Besides the various accomplishments I have named, he used to measure timber in bulk, and hay and straw in stacks, and ascertain their cubical contents by a process of his own. Metcalf afterwards became one of the greatest road and bridge constructors of the age.

It was in 1765, when an Act was passed to provide a turnpike road between Harrogate and Boroughbridge, that Metcalf then sold his carrier's waggon, and started as a road-maker. When executing a portion of this road, he sent in his tender for the erection of a bridge at Boroughbridge; it was accepted, and he completed the work within the stipulated time, and in a satisfactory manner.

In another of his contracts he constructed a road over a bog in almost the same manner as George Stephenson made his railroad over Chatmoss. He was always a great adept at making roads over marshes. When his contract for making the road from Huddersfield to Manchester was accepted, he found, to his dismay, that he was expected to traverse some marshy ground; and when he remonstrated, alleging the additional expense, he was told that he should not be a loser. Happily, owing to his great intelligence, he managed to overcome the difficulties which he encountered.

He was advised that he had better dig the bog out until he came to a solid bottom. Had he done this he would have had to dig a trench 9 feet deep by 42 feet wide, but this he naturally declined to do; he cut a deep trench on either side of the intended road, and threw the excavated stuff inward on to the basis of the road, so as to raise it to a convex form, and he filled the trench on either side with heather, and covered the road-track itself with bundles laid transversely, and over this he laid gravel; in fact, the road, in a way, was made to float upon the surface of the bog.

It is evident that Stephenson did not originate the idea of a floating road, since it is to Metcalf that we

owe the original idea. Both Metcalf's and Stephenson's plans coincided in so much that they isolated their road partly from the surface of the bog and yet made it float thereon simply by means of a sufficient extension of bearing surface, in the same way that snow-shoes sustain a man's weight, or a raft floats on water, which it would have a better chance of doing on a bog since its consistency is greater; in fact, a gentleman living in the neighbourhood of Chatmoss, over which Stephenson formed his railway, having brought some of the moss land into cultivation, used to provide his horses with flat wooden soles or pattens to enable them to walk over the bog. In the same way Stephenson floated his road capable of sustaining a locomotive and an accompanying train.

Metcalf, when surveying for his roads, always carried a very long hooked staff, and went quite unattended. He also constructed or altered the roads over the Peak, in Derbyshire.

The last road that Metcalf constructed was that between Haslingden and Accrington, with a branch road to Bury. Owing to numerous canals being made at the time, there was plenty of employment, and wages were high, so that, although Metcalf finished the work satisfactorily and received £3,500 for doing so, yet he found that he had lost exactly £40 after his two years of labour and anxiety. Thus did his connection with road-making cease, in 1792, when he was seventy-five years of age, after which he retired to his farm at Spofforth, near Weatherby.

The advantages of internal communication throughout a country by means of roads can not be sufficiently prized. The pack-horse has been superseded by the waggon, the waggon by the coach, and the coach

by the locomotive, and yet without the roads, which afford communication into the interior of the country from the various railway stations *en route*, the railway itself would not be of such advantage to us as it is.

Of late years the total length of the highways throughout England and Wales has been estimated to be 25,000 miles, whilst the principal byways have been estimated to be 100,000 miles. The average cost of maintaining cross-roads in 1880 was £12 9s. a mile, and the cost of maintaining the main coaching roads was £35 11s.

When the great main roads were improved owing to the establishment of fast coaches, the cross-roads followed suit, possibly owing to the force of example. As the roads became better, and coaches ran faster, travellers became impatient of delays, and consequently needless stoppages were not permitted by the proprietors, and they who wished to catch the coach on the main road had to hurry up a bit, having no time to waste on the cross-road, as the coach would wait for no one.

It was in the palmy days of coaching, before the advent of George Stephenson and his locomotive, that the great main roads of England were at their best. Mr. Smiles in his *Life of Telford* the engineer, speaks of the roads in Scotland. He says, that "fields lay uncultivated, mines unexplored, and all branches of industry languished, in the midst of an idle, miserable, and haggard population." The only roads of any importance were military roads, made by soldiers after the rebellions of 1715 and 1745. These roads were maintained at the public expense; they were little used, as they were laid out merely for purposes of military occupation and did not traverse

districts where the roads were required. The poverty of the inhabitants rendered the attempt to construct roads beyond their scanty means. In 1802, Mr. Telford was called upon by the Government to make a survey of Scotland and report as to measures that were necessary for the formation of new roads and the improvement and preservation of existing ones. The report was duly presented, printed, and approved. In this report Mr. Telford pointed out that the military roads were insufficient for the requirements of the day.

The difficulties encountered by the Bar in travelling the Northern Circuit are well described by Lord Cockburn. "There was no bridge," he said, "over the Tay at Dunkeld, or over the Spey at Forres—nothing but wretched ferries, let to poor cottagers, whose wives or daughters used to take us across these rivers.

"There was no mail-coach north of Aberdeen until after the battle of Waterloo. North of Inverness matters were still worse. There was no bridge over the Banley or the Conan; drovers coming south swam the river with their cattle. There being no roads, there was no use for carts. In the whole county of Caithness there was not a farmer who owned a wheel-cart; burdens were usually carried on the backs of ponies, but quite as often on the backs of women.

"Telford altered all this. Being commissioned by the Government to construct various roads throughout Scotland, besides bridges over rivers which were hitherto impassable, in the course of eighteen years he made 920 miles of roads, and made 1200 bridges, partly at the expense of the localities immediately

benefited, and partly at the expense of the nation. The consequence of this was that stage-coaches commenced running northwards from Perth to Inverness in 1806, were regularly established in 1811, and in the year 1820 no fewer than forty coaches arrived at the latter town in the course of a week, and the same number departed from it; the use of carts became practicable, sloth and idleness disappeared before energy, activity, and industry—all owing to the existence of good roads."

Mr. Codrington, in his work on the maintenance of macadamised roads, published 1879, says that, "by the latest Parliamentary return, £4,000,000 is spent annually on the roads of England and Wales, of which sum nearly all of it is spent on macadamised roads. This is exclusive of the metropolis, where £280,000 is said to be annually spent on macadamised roads."

Telford and MacAdam appear to be the only two men who greatly distinguished themselves as road engineers. Telford undoubtedly stands pre-eminent. MacAdam's doctrines were condemned by the partisans of Telford's system as contrary to the first principles of science; and Mr. Codrington says that many of his statemets were marked by a good deal of exaggeration. Mr. MacAdam's claim to the gratitude of those who make use of high-roads consists in the fact of his having been the first to direct public attention to the condition of the highways throughout England, and not so much in his having evinced any very great ability in their construction.

A Mr. Edgeworth, an Irish proprietor, wrote a treatise on roads, the second edition being published in 1817. He promulgated the system of broken road-covering some time before the appearance of MacAdam.

He differed from MacAdam only in one particular ; he advised that the interstices should be filled up with sharp sand or small gravel.

There is one thing which greatly increased the reputation of MacAdam. In the year 1830 his system was adopted in France. M. Dumas, Engineer-in-Chief of the Ponts et Chaussées, writing in 1843, declares that his roads, owing to the adoption of the macadamised system, had reached, in his opinion, the maximum of beauty, which must be accepted as the opinion of an enthusiast.

Mr. MacAdam was not educated as an engineer, although in his early days he was one of the trustees of a road in Ayrshire. Afterwards he was employed as Government agent for victualling the navy in the western parts of England. He continued the study of road-making, keeping in view the essential conditions of a smooth surface. Flints and gravel used to be thrown unbroken upon the roads, and so round that they had no points of contact, and so never consolidated. When a heavy vehicle passed over them their loose structure offered no resistance. The roads were thus constantly in need of repair.

In 1815 MacAdam for the first time devoted himself to road-making as a profession. He was appointed Surveyor-General of the Bristol roads. In carrying out his improvements in roads, he spent several thousand pounds out of his own pocket. In 1825, having proved his expenditure before a committee of the House of Commons, the amount was restored to him together with an honorary tribute of £2,000. Mr. MacAdam died poor, but, as he declared, an honest man.

The *Westminster Review*, vol. iv., page 354, has an article referring to MacAdam. It remarks that he

was the inventor of no system; that the custom of breaking stones small was practised in Sweden and Switzerland long before the existence of MacAdam; and it goes on to say that if MacAdam's name had not been admissible as a verb, it would have never been so generally known. Thus we say a macadamised road, or to macadamise a road; one could not well say, to Brown or Smith a road, or a Smithed or Brownd road. MacAdam certainly called attention to the condition of the roads, and persuaded the Turnpike Trustees to keep them in proper repair.

And yet, where there is much traffic, as in towns, macadamised roads get worn into innumerable holes, causing the greatest discomfort to persons driving over them—I refer to the granite-made roads, as with those made of a softer stone this discomfort is not felt. It was on this account that a road was being taken up at Tunbridge Wells while I was staying there, which is mentioned in the chapter on Road Construction and Maintenance.

The road on the Thames Embankment, between Northumberland Avenue and St. Stephen's Club, was a striking instance of this peculiarity. The whole roadway was one mass of depressions, causing the wheels of one's carriage to fly about in all directions; this could of course be remedied by picking up the roadway and laying it afresh; but it is no doubt in consequence of the hardness and unyielding nature of the granite that this happens. The granite is so hard that it does not crumble away at the edges and accommodate itself to its surroundings; in some places it sinks under heavy traffic, owing to no great resistance being offered to its consolidation, in other places it refuses to settle down, and consequently there is

a considerable variation in the level of the road. I have often thought if softer stone were mixed with the granite, whether this might not produce the desired effect.

For the streets of a town there is no doubt that wood-paving is superior to macadam ; it is pleasanter to drive over, it is easier to scavenge, the passage of vehicles occasions but little noise, and it is only the question of cost that should prevent its general adoption. A great part of London is now paved with wood, and whatever science can suggest or wealth procure, London should have, since is she not one of the greatest cities in the world, if not the greatest ? And yet the London pavements are disgraceful, and her streets are abominably scavenged.

In wet winter weather, even in the neighbourhood of Charing Cross, you may see the paving or flag-stones sunk one below the other, creating great pools of water like stagnant lakes, into which the unsuspecting traveller flounders. In Trafalgar Square, on the asphalte pavement around the fountains, there are huge ponds sufficiently deep and wide to drown a litter of puppies ; and then the streets, they swim in mud that rises over one's insteps.

And in dry summer weather, in every gutter there is the refuse of the preceding day, dirty paper, straw, and a thousand and one abominations which should have been conveyed away by the scavenger's cart. Then in hot, dusty weather, a water-cart is rarely seen, the streets smell, the dust covers one, and gets into one's eyes, and up one's nose, and penetrates even into one's house, and general complaints are uttered as to the dirt of London, when, if matters were only managed properly, Londoners might rejoice

in a condition of perpetual cleanliness at all times and seasons of the year.

Thus I have brought my history down from the time of the Carthaginians and Lacedæmonians to the Londoners of the nineteenth century. What we have lost in ignorance and barbarism, we have gained in a highly-cultivated system of perpetual dirt in wet weather, and dust in dry weather. Who is it benefits by this condition of things? No one except the boot-maker and the laundress. Dust rising from the street injures the interior of our houses, and all that is within, whereas mud is destructive to one's carriages, clothes, and boots. If the depreciation in property from these two causes were carefully computed, it would more than suffice to keep an enormous staff of workmen engaged night and day upon the maintenance and cleansing of the streets of the metropolis.

An improvement in this respect would benefit all classes of the community; considering the heavy rates paid by Londoners, it is only natural to suppose that the roads and pavements would meet, at the hands of the various parishes in which they are situated, with proper care and attention. If every one contributed just sufficient to keep the pavement and half the street that was immediately before their own dwelling clean, well scavenged, and well maintained, that would be quite sufficient. There is no reason why the streets of London should not be at all times in perfect condition, in the winter free from snow or mud, and in the summer free of dust, the drains well scavenged, the gutters constantly flushed, and the roads watered; were this done, in place of the heat, dust, and impure odours, the London streets might be as clean and fresh as any country road after an April shower.

I firmly believe that all that is required to render the buildings fresh and clean, is to wash them. If on the occasion of the Queen's Jubilee, every householder in London had set-to to paint and wash his house, London would have assumed an appearance that would have not only gladdened the hearts of all lovers of cleanliness and cheerfulness, but would have provided such an extraordinary and unaccustomed spectacle, as would never have been forgotten during the lifetime of those who beheld this singular transformation.

CHAPTER II.

MAIL AND STAGE-COACHES.

“All the world’s a stage.”

SHAKESPEARE.

Last days of road travelling—Present and past aspect of English roads—Long-distance day-coaches—Road versus rail—Of the clock—The time journeys occupied—Horses a necessity—Fast coaches—Guards’ time-bills—Too late—Farming turnpikes—Snow-storm of 1854—Great snow-storm of 1836—The clerk of the weather—Sleighing and sleighs—Driving in a fog—Old coaching inns—Mail guards—Inn yards and stables—The yard of tin—Improvement in coaches—The last coaches—The preservation of leather—Coach inspectors—Highwaymen—Skids and breaks—Horsing the mails—Mail coachmen—A coach attacked by a lioness—Coach proprietors—Rail and road—Coach-horses—Immature—The Telegraph—Scarlet coats—In the City—State of English highways—A Transatlantic opinion—Coaching misadventures—High-roads passing through tunnels—Colonel Paterson’s road-book—Other road-books—Cost of coach-horses—Lord William Lennox—Death from exposure—Coaches racing—Convicted of manslaughter—A careless coachman—An English coach on a French road—The locomotive.

As I have endeavoured to explain, the progress made in the construction of high-roads was very slow, but when in the last days of coaching all had been done that could be done to render them perfect, suddenly they were abandoned, and the stream of traffic was turned towards the railway; then the roads appear to have gone gradually back, not to their original state—that would have been too sad, and would have been impossible at the present time—but they vastly differed from the roads over which the mail and stage-coaches had been running. Consequently first came a period of slow but sure improve-



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THE RED ROWER
The Winchester and Southampton Stage Coach.

ment, a period in the history of roads when engineers of the highest skill, intelligence, and experience, were employed by Government in the construction of the highways; then, when, owing to the introduction of railways, the high-roads were no longer the great avenues of traffic and internal communication throughout the kingdom, they fell into a species of disrepute; the infinite care which had been lavished on them was no longer deemed necessary, and they became as we now see them, left in the charge of Highway Boards inexperienced in their management, and to surveyors utterly without knowledge of road construction and maintenance, or too indolent to learn.

A very great and remarkable change therefore has taken place in country roads since the palmy days of coaching. Roads, fifty years ago, were avenues by which all travellers and merchandise were conveyed from one part of the kingdom to another, either by coach or waggon, except they were very wealthy persons, in which case they travelled in their own carriages, and were supplied with fresh horses at the various inns at which they stopped on their way; but this was an extravagant way of travelling, very much the same as taking a special train. The great high-roads just before the advent of the locomotive were kept to perfection. Large gangs of road-menders worked at intervals along their whole length, and they were wider than they are now; the space we so frequently see covered with grass alongside the road was formerly a portion of the roadway.

The great main roads in the later days of coaching, just before the stage-coach was superseded by the locomotive, must have presented

a very different appearance to what they do now in their neglected and abandoned condition. In those days a person could not pass a distance of four or five miles along one of these great main roads without meeting mail and stage-coaches, postchaises with their four horses, gentlemen's travelling carriages, bound on a journey, in addition to other vehicles which even now one meets on a high-road, and which the advent of the rail has not rendered obsolete or swept away. What is now frequently termed a lonely country road was in those days a scene of energetic life and activity. The railroad has since then absorbed this continuous stream of vitality, and the roads have, comparatively speaking, owing to the cessation of traffic thereon, fallen into disuse.

In the course of a drive now over some miles of an important main road, in place of the mail and stage-coach, the post and travelling carriage, we see agricultural waggons, coal, stone, and brick carts, brewers' drays, an occasional carriage, a few dog-carts driven by gentlemen or farmers, and a sprinkling of village carts; but the glory of the great main roads has departed never to return.

It must have been a pleasant sight in the course of a walk or drive along a country road to see the coaches passing to and fro, every coachman having to draw aside at the approach of the mail as it dashed by with its team of horses, urged to their utmost speed, whilst the coach itself was quite sufficient to attract attention, bearing as it did the Royal Arms, whilst the coachman and guard in their scarlet and gold liveries contributed to its singularity and smart appearance.

In those days coaches travelled what was then considered very fast, but long before the advent of

coaches every stage waggon on the road, if it exceeded a pace at which previous waggons had journeyed, was described as fast, and frequently as flying. In the later coaching days twenty minutes only was allowed for passenger's dinner; this was the time permitted on the "Telegraph," the fast coach from London to Manchester, and other coaches mentioned elsewhere.

The generality of coaches did not travel more than nine and a half miles an hour by day and about eight and a half by night, some exceeded this pace, and just before coaches ceased running the speed was very considerably increased. Long-distance day-coaches were established when the "Wonder" ran to Shrewsbury, 158 miles, in one day. The longest distance previously performed by a day-coach was 100 and 125 miles, from London to Bristol. Shortly after this the Exeter day-coach, called the "Telegraph," was placed on the road, the distance run in the day being 165 miles,* and the Manchester day-coach, the "Telegraph," also ran 186 miles during the day. But the time coaches took to perform their journeys was dependent very much upon the condition of the roads. Of course in bad weather the roads were sometimes rendered impassable by reason of floods in low-lying districts, and in winter by heavy snow-storms; under such conditions the best roads may be rendered impassable. There was a very celebrated coach, called the "Beaufort Hunt," which ran from London to Bath; it used to maintain the extraordinary speed of eleven miles an hour except where it encountered steep hills.

The "Quicksilver," a Brighton coach, performed the distance from London to Brighton in four hours

* See page 76.

and a half. Mr. Harris, in his old coaching days, says that "this coach was horsed by a man named Israel Alexander and started from the 'Three Tuns,' in Aldgate, close to Mrs. Nelson's." This coach went down to Brighton on the opening day of Parliament with a copy of the King's Speech in three hours and forty minutes; this was at the rate of fifteen miles an hour, a very great speed for a coach to maintain throughout an entire journey, although nothing compared with the speed of an express train. The only present mode of travelling as regards speed that can be compared to coaching is the rate at which steamboats travel. On one or two occasions the White Star vessels, and other ocean steamers, have averaged fifteen knots across the Atlantic; but there is no limit to the speed of a locomotive. Stephenson's "Rocket," when on its trial attached to a train only, went twelve and a half miles an hour, but afterwards by itself it steamed at the rate of twenty-nine miles. This was looked upon at that time as a remarkable feat, but it afterwards attained a speed of sixty miles. The locomotives drawing express trains travel generally at about forty-five miles an hour; but this speed is equal frequently to sixty-five miles an hour, or nearly 100 feet in a second, that is if the locomotive were not attached to a train. Provided that the line is clear, that the rails are in good condition, and that no stoppages are to be made, there is no saying at what speed a locomotive might not travel, either by itself, or with one or two carriages attached. Much has been said and written about Pneumatic Railways; and, although several trials have been made of the Pneumatic Railway, no one as yet has been able to overcome the friction or provide



The above engraving represents GEORGE STEPHENSON'S LOCOMOTIVE, the "ROCKET," which gained the prize of £500 awarded by the directors of the Liverpool and Manchester Railway Company, having, on its trial, which took place on the 8th of October, 1829, run at the speed of 29 miles per hour with a load of 13 tons attached. When afterwards running without any load attached to it, it accomplished the then extraordinary speed of 35 miles an hour. Although it was not the first locomotive that had been made, yet it was the first of any importance, and it has proved the forerunner of the railway system throughout the world.

a means of preventing the escape of air, so detrimental to their success. Before further trials are made it would be well to see if trains could not run at a higher speed than they do now without running off the line. But I will speak of this in another chapter.

To return to the speed of coaches. As I have said, the Brighton "Quicksilver," on one occasion, ran to Brighton in three hours and forty minutes; everything, of course, was ready on the road for expediting the journey in every possible way. At the present time, on the South-Eastern line, some of the trains are so slow, that the coach to Tunbridge Wells took very little longer than the train; and in many parts of England, on various lines, the trains are frequently so slow that a well-horsed and well-driven coach could travel nearly as fast.

The time allowed for the mail-coach from London to Edinburgh was forty-two hours and twenty-three minutes; the time for the return journey from Edinburgh to London was forty-five hours and thirty-nine minutes. The distance, according to Paterson, is about 380 miles; but it varies according to the route taken, the most direct being by Catterick and Jedburgh, which is 367 miles, whereas by Coldstream it is 380 miles, and by Berwick 391 miles, and lastly, by the A.B.C. time-table, from the Great Northern terminus at King's Cross *viâ* York, it is 397 miles, and from St. Pancras *viâ* the Midland Railway by Carlisle, 404 miles. The Great Northern takes ten hours, and the Midland also takes about ten hours in performing the journey, consequently by coach it took about four times as long as by rail.

The Exeter coach, the "Telegraph," of which I

have spoken elsewhere,* when horsed by Mrs. Nelson and Mr. Sherman, took seventeen hours in going from London to Exeter, a distance by road of 165 miles by the time-bill, according to Paterson it is 172 miles, by rail from Waterloo it is 171½ miles, and from Paddington 193¾. The coach used to leave the "Bull Inn," Aldgate, at half-past four in the morning, and quitted Piccadilly at half-past five.

It must be remembered that the King or Queen's highway was the only route by which, in those days, one could travel, except it were to journey by river or sea. The railroad is now connected inseparably in our minds with all idea of travel, and our almost daily acquaintance with the iron road has caused all questions respecting distance to be associated in our thoughts with the time trains take to perform the journey; consequently, the intention of going any distance is regarded by us, to carry it into effect, as necessitating the occupation of a certain period of time. This appears the more remarkable, when we consider the various ways in which the hour or the passage of time has been mentioned at various periods of history.

Our forefathers used to speak of four or five a.m. or p.m., as four or five of the clock, and according to the hour mentioned, a number of quaint phrases were used to denominate the time. Our "o'clock" is evidently a corruption of their mode of speaking when saying of the clock.

But nothing is a greater evidence of the improvement we have undergone as regards the utilisation of time, than the way in which the time of departure or arrival of trains is mentioned in our railway time-

* See page 73.

tables, that is by putting the minutes after the hour, and speaking of time in like manner, as 6.45, 8.32, 12.14; in fact, watches are now made on this principle.

The time taken by the coaches, compared with the rail, was so great that, as a rule, the time occupied by all railway journeys of any importance, undertaken on good lines, must be multiplied by four or five in order to ascertain what time would be required by a coach to perform the same journey. Thus, to Brighton by rail would occupy one hour by fast train, whereas by coach it would take four or five hours in the ordinary course—thirteen miles an hour if the coach took four hours, and a fraction over ten miles an hour if it took five hours, the distance being fifty-two miles. These two speeds per hour are very high, seeing that although some coaches greatly exceeded this speed, yet the average performance of coaches throughout the United Kingdom, taking slow and fast alike, appears to have been about eight and a half miles an hour. It must be remembered that the horses were changed every few miles; but when on a journey with a private coach or carriage, and there is no change, every coachman should remember that it is not distance so much as speed that exhausts horses. On a driving tour, when there is no change, the distance should never exceed twenty miles a day, and even that is too much on a bad road or in a hilly country.

The idea of a journey at the present day is a short drive or a walk to a railway station, where we take our ticket and seat ourselves in a comfortable railway carriage, from which we probably do not stir until we have almost reached our destination; and although a coach-drive on a fine day is very delightful for a

distance under fifty miles, there is in it neither the speed nor the repose incidental to a railway journey in a good train on a good line, in a properly-coupled and easily-hung carriage.

In the coaching days, horses must have been regarded as of far greater importance than they are now, as in every journey undertaken by travellers, they were dependent for their safety and for the speed at which they were conveyed, on this most willing and obedient servant of mankind. When we consider the enormous strength possessed by a horse, it is marvellous that he should ever become subservient to our will, and that at the bidding of man he should labour so conscientiously in his service. Many people, although not owning horses of their own, are daily being served by them indirectly. In fact, such is the case with all persons who use public conveyances drawn by horses, yet not half the people who do so bestow a thought on the willing beast who patiently labours in their service.

A few years ago, I saw a heavily-laden omnibus, the horses of which could not drag it up the hill at the lower end of Regent Street, close by Waterloo Place ; and yet it was not for the will to do so, as they struggled with all their might, thrusting their shoulders into their collars sufficiently to break the traces, whilst the coachman was lashing them without mercy ; the omnibus was full within and without, yet not a soul descended from their seats to relieve the poor brutes. I cannot believe that if any of those persons had known anything about horses, they would have sat still as they did ; in fact, when urged to get down and so give the horses a chance, the reply was : " We have paid our fares, they should get better horses

or some more horses ; we don't see why we should move." Such is the disposition of either ignorant or unfeeling persons who make use of public conveyances ; and, in my opinion, it should be left to the discretion of a driver or conductor, in such a case, to return the passengers their fares, rather than urge the horses to perform what is beyond their powers.

It appears that the fastest coaches performing long distances, were not put upon the road until a few years before the decline of coaching ; these were mostly stage-coaches, which were as fast as the mails, but for punctuality the mails surpassed them ; the Shrewsbury stage-coach, "The Wonder," was one of the fastest coaches of the day.* Mr. Harris says it took eleven hours and four minutes from London, whilst the mail took eleven hours and eight minutes ; yet in the time-bill it is mentioned as taking ten hours one minute. When the day-coaches pulled up at an inn to change horses, there were always plenty of men to lend a hand in putting the fresh team together, but with a night-coach the case was different ; frequently the coachman, the guard, and the horsekeeper had to do all the work themselves, and when there was no guard then the coachman and horsekeeper had to do it. A very fast coach out of London was the Holyhead, but the fastest in the United Kingdom, excepting the "Beaufort Hunt" to Bath,† was that which ran from Preston to Liverpool ; this coach accomplished ten miles five furlongs per hour, the entire distance being only thirty miles. A writer on the subject says that the speed of mail-coaches averaged eight miles seven furlongs an hour. In the year 1836, the last year of William the

* See page 73.

† See page 73.

Fourth's reign, and one year before the Queen ascended the throne, there were only six mail-coaches which travelled at a rate of ten miles an hour, and upwards. These were the

	Miles.	Furlongs.
Birmingham and Sheffield	10	0
Pontefract and Leeds	10	0
London and Holyhead	10	1
Gloucester and Carmarthen	10	2
Carlisle and Glasgow	10	4
Liverpool and Preston	10	5

As regards the number of horses employed on all the fast coaches, mail or stage, one horse a mile is what was always allowed.

The guards of the various coaches always had to fill in their time-bill, to which they were forced to sign their name. The General Post Office issued time-bills to their guards and coachmen, upon which was the following notice :

"The time of working each stage is to be reckoned from the coach's arrival, and if any time is to be recovered in the course of the stage, it is the duty of the coachman to be as expeditious as possible, and to report the horsekeepers if they are not always ready when the coach arrives, and active in getting it off. The guard is to give his best assistance in changing, whenever his official duties do not prevent him."

Similar rules were issued by all the large stage-coach proprietors, who were not to be outdone by the Postmaster-General in the matter of speed and punctuality. Their guards carried time-pieces like those of the mail guards, and Mr. Harris says that at the foot of the Exeter "Telegraph" there was this notice :

"The guard is to fill up this bill precisely as the coach is worked over each stage, and hand it to the bookkeeper at each end of his journey, with all delays accounted for, and his name signed to the same."

Whilst at the foot of the Manchester "Telegraph" day-coach time-bill, there was the following notice :

"Observe—That a fine of one shilling per minute will be incurred by each proprietor for every minute of time lost over his stage or stages, to one-half of which the coachman and guard will be held liable equally between them should their employers see sufficient cause for enforcing the same. Misdating the time-bill, or neglecting to date at all (either with pen, ink, or pencil) at any of the above places the moment he arrives, will subject the guard to a fine of five shillings for each default. The guard is also to leave his time-bill in the office on his arrival at the 'Bull and Mouth,' or forfeit five shillings for each omission."

This coach was horsed as far as St. Albans by Mr. Sherman.

It is a pity that railway companies and the guards and engine-drivers employed by them cannot be made responsible in the same way ; were this done, and a fine imposed every time the train was late, passengers would not be made to suffer in consequence of their unpunctuality. In fact, it would be a good thing if the Government could be induced to take over many of the railways.

Mr. Harris gives some copies of time-bills as shown on next page :

Time Bill of the "Telegraph" Coach, from London to Manchester.
Down. Guard.

Leaves the "Bull and Mouth," 5 a.m. ; left the "Peacock," 5.15.

PROPRIETORS.	PLACES.	MILES.	TIME ALLOWED.		SHOULD ARRIVE.	DID ARRIVE.	
			H.	M.	H. M.		
Sherman	St. Albans	19½	1	54	7. 9		
Liley	Redbourn	4½	0	22	7.31		
Fossey	Hockliffe	12½	1	10	8.41		
	Northampton (Breakfast)		0	20			
Shaw	Harboro'	47½	4	30	1.31		
	Leicester (Business)		0	5			
Pettifer	Loughboro'	26	2	27	4. 3		
	Derby (Dinner)		0	20			
Mason	Ashbourne	30	2	48	7.11		
Wood	Waterhouses	7½	0	43	7.54		
Linley	Bullock-Smithy	29½	2	46	10.40		
Weatherall & Co.	Manchester	9	0	50	11.30		
		185	18	15			

Guard (*sign your name*).

Timepiece No.

Time-bill of the "Wonder" Coach from London to Shrewsbury.
Despatched from the "Bull and Mouth" at 6.30 morning.
Left the "Peacock" at Islington at 6.45 o'clock.

Down.

Guard.

PROPRIETORS.	PLACES.	MILES.	TIME ALLOWED.		SHOULD ARRIVE.	DID ARRIVE.	TIME LOST.
			H.	M.	H. M.		
Sherman	St. Albans	22½	2	3	8.48		
J. Liley	Redbourn	4½	0	25	9.13		
	(Breakfast)		0	20			
Goodyear	Dunstable	8¼	0	40	10.21		
Sheppard	Daventry	29¾	2	54	2.15		
Collier	Coventry	19	1	47	4.2		
	(Business)		0	5			
Vyse	Birmingham	19	1	39	5.46		
	(Dinner)						
Evans	Wolverhampton	14	1	15	7.36		
	(Business)		0	5			
	Summer House	6½	0	35	8.16		
J. Taylor	Shiffnall	6½	0	35	8.51		
H. J. Taylor	Haygate	8	0	43	9.34		
J. Taylor	Shrewsbury	10	0	56	10.30		
		158	15	45			

Guard (*sign your name*).

Timepiece No.

The "Defiance" coach from London to Exeter had a similar time-bill, with the exception that there was a column for the enumeration of the passengers in and out of town. This coach started at a quarter past three in the afternoon, from the "Bull Inn," Aldgate, and from Piccadilly at half-past four. It stopped for tea at ten o'clock at night, and again for breakfast in the early morning. Both for tea and breakfast twenty minutes was allowed, both on the up and down journey; the distance was $168\frac{1}{4}$ miles, and the time allowed nineteen hours.

The writer whom I have mentioned gives a list of the mails out of London, and the time in which the journeys were performed, and the amount paid to the horseowners by the Postmaster-General for horsing the coaches as follows :

NAME OF MAIL.	DISTANCE.	TIME, INCLUDING ALL STOPPAGES.		RATE OF TRAVELING, INCLUDING STOPPAGES.	AMOUNT PER DOUBLE MILE PAID FOR HORSEING.
		H.	M.		
	MILES.			MILES PER HOUR.	
Bath	110'4	11	0	10	2 <i>d.</i>
Birmingham & Banbury	119'2	11	56	9'7	2 <i>d.</i>
Bristol	121'0	11	45	10'2	1 <i>d.</i>
Devonport	217'5	23	44	9'0	2 <i>d.</i>
York	197'0	20	54	9'3*	1 <i>d.</i>
Exeter	176'2	18	59	9'2	2 <i>d.</i>
Gloucester	111'3	11	55	9'2	2 <i>d.</i>
Holyhead	259'2	26	55	9'5	1 <i>d.</i>
Hull	172'5	18	12	9'3	2 <i>d.</i>
Leeds	196'7	21	2	9'2	2 <i>d.</i>
Liverpool	201'3	20	50	9'3	1 <i>d.</i>
Manchester	185'2	19	0	9'6	1 <i>d.</i>
Norwich (by Newmarket)	117'3	13	1	9'0	5 <i>d.</i>
Stroud	104'7	12	9	8'7	3 <i>d.</i>
Worcester	114'2	12	20	9'1	3 <i>d.</i>

* This was the Edinburgh mail.

Mr. James Payn, in a volume of essays, speaks of the punctuality of coaches in the following terms. In a chapter which he entitles "Too Late," he says: "It is recorded of the late Mr. Leigh Hunt that his procrastination was so excessive that he could never trust himself to rise in time to leave home and take the coach, but was obliged to engage a bed overnight at the inn from which it started. He was a punctual man, however, compared to me. I could never make certain of being a passenger unless I slept in the coach itself. The nicety affected by these vehicles in the matter of time (and particularly if they carried the mail-bags) was simply ridiculous.

"They would not, I believe, have waited for King George in person, although they carried his very arms upon their sides. How often have I engaged post-horses at a ruinous expense to overtake those implacable machines! How often have I entered them at the very moment of departure with my waistcoat unbuttoned and my coat and top-boots in my hands! How often have I toiled after their revolving wheels, making fruitless signals of distress, and with my cries for succour drowned in the 'tooting' of the relentless horn!"

In the days of coaching the farming of turnpike tolls was a great source of revenue. A Mr. Levy farmed tolls to the amount of £500,000 a year, and post-horse duties to the amount of £300,000. The post-horse duties were fees payable to Government by horse proprietors when letting or jobbing post-horses to travellers. These sums proved the enormous amount of traffic that must have existed upon the roads in those days. It must be remembered that these figures do not represent the profit, but merely the net

value of the tolls and duties. The tolls were very high, and the turnpikes were very numerous; coaching and posting constituted the principal source of revenue to the turnpike trustees. On the road between London and St. Albans, a distance of only twenty-one miles, there were five gates, on passing through which coaches had to pay toll. It is said that on the Brighton road there was one gate at which the tolls amounted to £2400 a year, and Mr. Levy, the great turnpike farmer, estimated that stage-coaches alone paid the toll-takers at this gate £1600 per annum. The Birmingham and London coach, running every day in the year, is said to have paid £1428 in turnpike tolls.

Some of the coaches in the old days did not carry guards; this always appears to me a very dangerous custom, as supposing there were no passengers, and any accident occurred, the coachman, not being able to leave his seat, must have been powerless to avert such disaster.

The coaches that travelled without guards were day-coaches, the principal of which were the Dover, Southampton, Bristol, Weymouth, Yarmouth, and Norwich. Apart from the objections I have mentioned to not carrying a guard, it is difficult to understand who kept the time, looked after the passengers' luggage, skidded the wheel when descending hills, and did the thousand and one things that were requisite to the comfort and convenience of the passengers. Some of the coaches which did carry guards, were the Monmouth, Exeter, Hereford, Taunton, Shrewsbury, and Manchester.

When there was no guard, the coachman had to do everything himself, and hard work he must have had to fulfil all his multitudinous duties. The mail guards

had rather a harder time of it than the ordinary stage-coach guards, as they were responsible for the safety of the mails, and the speed and punctuality with which they were forwarded to their destination. In heavy snow-storms, or when the road was almost impassable, the coachman had to push on at all hazards ; but when his coach came to a standstill and could be moved no further, it was then the guard who had to take matters in his own hands, to remove the mails from the coach, and, taking a couple of horses, fight his way on at the peril of his life.

I do not know that anything gives one a better idea of the discomfort and danger of road travelling, in the depth of winter, than the tales that have been handed down to us of how the roads were blocked during heavy snow-storms. Even trains at the present day sometimes find it impossible to make their way through a snow-drift, but this is rarely the case in this country ; in Canada and in Russia, snow-ploughs are attached to the front of the locomotives ; but, so far as Great Britain is concerned, we are exempt from such disasters save in exceptional cases.

It is only in Scotland that a heavy snow-storm can seriously hinder and obstruct a train. I learn from the *Times* of the 3rd of January, 1854, that there was at that time a severe snow-storm, accompanied by intense cold, which prevailed throughout the whole of England. In London the thermometer indicated 8° below zero. The North-Western line was blocked up at the Tring Cutting, and a mail-train lay imbedded there for five hours ; the Great Northern was blocked up on both rails at Grantham, and traffic between Peterborough and Newark became impossible both by road or rail.



THE SNOW STORM OF DECEMBER 1836

The Louth Mail in difficulties. The mail bags taken on by the guard in a post chaise with four horses.



In consequence of the blocking up of the Thames in almost all the navigable parts, coals rose to an enormous price, and the metropolis was threatened with total darkness, owing to the inability of the gas companies to procure a supply. All this goes to prove, that with the advent of railroads we had not conquered the elements.

In the winter of 1836 there was a very severe snow-storm, of which a West Country newspaper gives a very interesting account, which appears in Mr. Harris's book on coaching as follows :

"The heavy fall of snow experienced in and around the metropolis during Christmas night appears to have extended over every part of the kingdom. On Sunday morning scarcely any of the mail-coaches arrived in London before half-past eight o'clock, owing to the heavy state of the roads ; but as on that day they bring no bags, no great exertions were made for keeping time. The guard of the Glasgow mail, which arrived on Sunday morning, said that at one place the mail was two hours getting over four miles of ground. Never before, within recollection, were the London mails stopped for a whole night at a few miles from London, and never before has the intercourse between the southern shires of England and the metropolis been interrupted for two whole days. None of the regular coaches due on Monday from any part of the country had arrived during the night. The Dover, Hastings, Brighton, Chester, Edinburgh, also the Liverpool and Leeds evening mails, had not reached London at twelve o'clock. The only mails that arrived up to that hour were the Poole, Portsmouth, and Ipswich, the latter of which did not reach the Post Office until a quarter to twelve. Fourteen

mail-coaches were abandoned on the various roads. The Brighton mail (from London) reached Crawley, but was compelled to return; the Dover mail also returned, not being able to proceed further than Gravesend. The bags for places beyond Crawley and Gravesend were left at those towns respectively. The Hastings mail was also obliged to return. The Brighton up mail of Sunday had travelled about eight miles from that town when it fell into a drift of snow, from which it was impossible to extricate it without further assistance. The guard immediately set off to obtain all necessary aid; but, when he returned, no trace whatever could be found either of the coach, coachman, or passengers, three in number, who were eventually rescued from their perilous positions. After much difficulty the coach was found, but could not be extricated from the hollow into which it had got. The guard did not reach town until seven o'clock on Tuesday night, having been obliged to travel with the bags on horseback, and in many instances to leave the main road, and proceed across fields in order to avoid the deep drifts of snow. The passengers, coachman, and guard slept at Clayton, seven miles from Brighton. The road below Handcross was quite impassable. The non-arrival of the mail at Crawley induced the post-master there to send a man in a gig to ascertain the cause on Monday afternoon. No tidings being heard of man, gig, or horse for several hours, another man was despatched on horseback, and after a long search he found horse and gig completely built up in the snow. The man was in an exhausted state. After considerable difficulty the horse and gig were extricated, and the party returned to Crawley. The

man had learned no tidings of the mail, and refused to go out again on any such exploring mission.

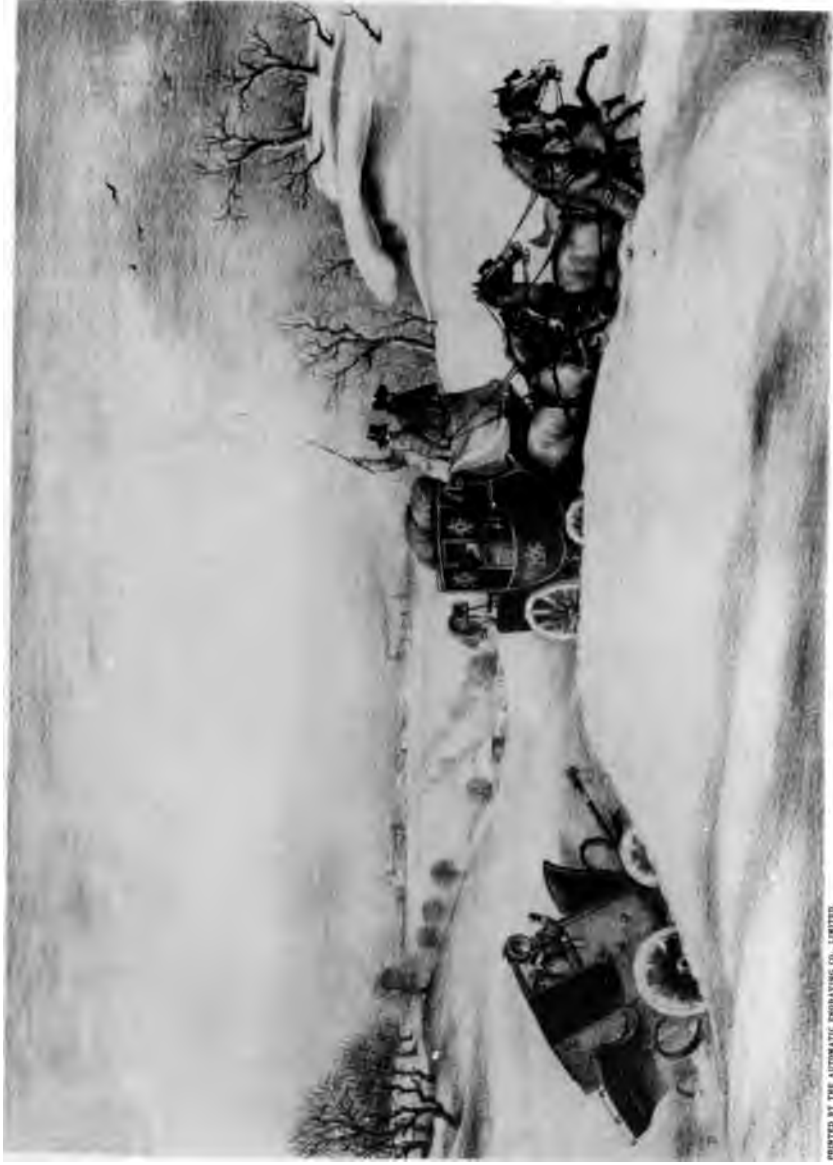
"*Brighton, Monday.*—All this part of the country is at the present moment buried in snow. A stableman was picked up in Black Lion Street last night by the police, frozen to death ; another, an old man, named Freeman, dropped dead in the street from sheer cold. The 'Times' coach, which leaves London at four o'clock and generally arrives here a little after nine, did not get in till twenty minutes past eleven, being for the last fifteen miles of the journey clogged up by the snow. The Gloucester mail, which ought to have been in by five o'clock yesterday afternoon, was obliged to stop on the road, and the guard and the coachman reached this town only at one o'clock this morning, having brought the bags in a cart along the beach ; they were, however, so affected by the cold that the guard now lies, it is feared, in a dying state. The mail started as usual for London last night, but had not got three miles before it was obliged to return. A King's messenger, who had important despatches with him, attempted, with the assistance of a guide, to travel on horseback, but could not get on. The messenger is about to start again in a post-chaise, and the mail-bags will go with him, but no passengers. Not a coach besides has left this town or come into it to-day.

"The Portsmouth 'Regulator' on Monday got buried at Horndean Hill in a snowdrift, and so continued for three hours and twenty minutes, when, by the assistance of numerous labourers and extra horses, the coach was released. From Marlborough Forest to Devizes the roads are dreadful, and the hollows have from twelve to sixteen feet of snow. His

Grace the Duke of Wellington arrived at Marlborough on Monday evening in his travelling carriage-and-four, with outriders. It was understood His Grace was journeying to the mansion of the Duke of Beaufort to attend at the marriage ceremony to give away the daughter of the late Duke of Beaufort to Mr. Codrington, son of Sir Bethel. His Grace was anxious to pass onward from Marlborough directly ; but, learning the roads were impassable, he stopped for the night at the 'Castle Inn' (kept by Thomas Cooper, a well-known coach proprietor and post-master on the Bath road), but now the site of Marlborough College. The next morning his Grace started ; but the carriage got fixed in a wheat-field between Marlborough and Badminton. Fortunately, the surveyor of that line of roads, Mr. Merrifield, was not far distant, being in charge of a body of labourers ; and one of the outriders coming to him, he readily offered to go to the assistance of the Duke, whom he piloted across the country till they came to a sound-bottomed road.

"The Bath and Bristol mails due on Tuesday morning, were abandoned eighty miles from London, and the mail-bags were brought up in a post-chaise-and-four by the two guards, who reached London at six o'clock on Wednesday morning. For seventeen miles of the distance they had come across fields. The Manchester down mail reached St. Albans, and getting off the road into a hollow was upset. The guard returned to London in a post-chaise and four horses with the bags and passengers. They reached the 'Swan with Two Necks' about noon.

"About a mile from St. Albans, on the London side, a chariot without horses was seen on Tuesday nearly buried in snow. There were two ladies inside



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THE SNOW STORM OF DECEMBER 1896

The Liverpool Mail in a snowdrift. A post boy who has gone for fresh horses.

who made an earnest appeal to the mail guard, whose coach had got into a drift nearly at the same spot. The ladies said the post-boy had left them to go to St. Albans to get fresh cattle, and had been gone two hours. The guard was unable to assist them, and his mail extracted, he pursued his way for London, leaving the chariot and ladies in the situation where they were first seen. The Devonport mail arrived at half-past eleven o'clock; the guard, who had travelled with it from Ilminster, a distance of 140 miles, states that journey to have been a most trying one to both men and cattle. The storm commenced when they reached Wincanton, and never afterwards ceased. The wind blew fresh, and the snow and sleet, in crossing Salisbury Plain, was driving into their faces, so as almost to blind them. Between Andover and Whitchurch, the mail was stuck fast in a snow-drift, and the horses, in attempting to get out, were nearly buried. The coachman got down, and almost disappeared in the drift upon which he alighted. Fortunately, at this juncture a waggon with four horses came up, and by unyoking these from the waggon and attaching them to the mail, it was got out of the hollow in which it was sunk. The Exeter mail by Yeovil, due on Monday evening, arrived at one o'clock a.m. on Tuesday. The mail-coach, seven miles from Louth, had got off the road and went over into a gravel-pit. A horse was said to be killed by the accident, and the guard severely bruised.

“Last night, the mail which was proceeding to London was regularly blocked up by the snow, and 300 men were immediately sent to make a passage for it, principally military sappers and miners, and after some hours they succeeded in reaching the mail, when

the letter-bags were taken out, and forwarded to London by express.

"*Thursday*.—The few accounts received from the provinces yesterday were of rather a gloomy description. The atmosphere still appears to be loaded with snow, and a second heavy descent is feared. The Dover mail, sent out on Wednesday night, only reached Rochester and then turned back.

"Beyond, the country is deeply buried in snow, and there has been no communication by horse or foot downward since Sunday. By Chatham lines, the snow is from thirty to forty feet deep. Application having, on Tuesday, been made to the Commandant of the forces stationed at Chatham, by the surveyor of roads, for assistance, all the military were ordered out, and about 600 men have ever since been employed in clearing the roads.

"The snow has drifted to such an extent between Leicester and Northampton as to occasion considerable difficulty and danger. In some parts of the road passages have been cut (sufficiently wide for a coach to pass), where the snow had drifted to the depths of thirty, forty, and, in some places, fifty feet. At Stroud, near Rochester, at the bottom of the hill, near the milestone, a cottage was completely buried in snow, and the inmates had to be dug out.

"*Manchester*.—The principal roads which have thus been rendered for a time nearly or wholly impassable are the road to Sheffield, by Glossop and the woodlands, which is choked up beyond Glossop in the wild district of the woodlands; the London road in the south of Warwickshire; also between Ashbourne and Derby (where one of the mails is said to be stopped); and it is also said to be impassable a

short distance south of Leicester, where some coaches are stated to be detained. Seventeen coaches (and it is probable that the 'Estafette,' and eight fast coaches running between this town and the metropolis, are of the number) are stated to have stuck fast at or near Dunchurch, which is about a stage south of Coventry.

"*Bristol*.—A very heavy fall of snow, accompanied by most violent gusts of wind, took place on Saturday and Sunday last, which had the effect of obstructing and rendering impassable the road betwixt this city and London. On Marlborough Downs and in that neighbourhood, the drift had accumulated to a depth of fourteen feet in some places, and it became necessary to remove it along four miles of the road. There has been no fall equal to the present since 1806, when the unfortunate Neville was frozen to death; but the atmosphere had not then been particularly cold."

The above account I found to be so badly expressed and so difficult to understand, that I have been forced to add a word here and there to make the meaning comprehensible. In the same way, I have left out a few passages which are of no interest to the present generation.

I trust I am not appropriating what does not belong to me, since I have a virtuous horror of anything like literary piracy; but it would be impossible to write a book on a subject of this kind that was entirely the emanations of one's own mind. It is only the writer of fiction that can lay claim to the proud distinction of being purely original, and not dependent on books of reference of any kind. As regards the above account, it is copied from a Western provincial journal published in the year 1836, and I give it almost verbatim, particularly as a similar, though not

quite such an accurate, account appeared in all the newspapers of that day.

These accounts go to prove the peril and the hardship of a winter's journey on a four-horse coach. The impression made upon the minds of all Englishmen by the erratic changes of our delightful climate must be that the clerk of the weather is a person imbued with no fixity of purpose. He appears like some experimentalist who is always striving after the unattainable, who, when his researches are so successful as to justify him in settling into a condition of well-earned repose, suddenly acts in a manner entirely undeserving of the good opinion we are beginning to form of him. Having made every one comfortable and happy, he breaks out again into all manner of wild excesses, like a man who, having taken the pledge and actually remained sober for a month, suddenly allows his virtue to forsake him, and vice once more to obtain the mastery. One day he sends us insufferable heat, and the next day we are almost perishing with cold. He does nothing uniformly, nothing methodically. When hot weather does set in, as was the case during the month devoted by Londoners to the Queen's Jubilee, very frequently a drought ensues, the thermometer at the same time registering a heat that is positively tropical. Then, in winter he errs in the opposite direction, and the shores of Great Britain are, at long intervals, I admit, visited by cold, the rigour and severity of which might compare favourably with that which prevails on the Russian steppes, or in the northern parts of our Canadian dominions.

This being the case, the sports and pastimes in which the youth of England loves to indulge are



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The Birmingham Mail hard and fast in the snow: the guard proceeding on to London with mail bags.

frequently surrounded by so many objections, on account of the weather, that they are forced, much against their will, to abandon each in their turn. Except for the very cold winter months, coaching is perhaps a pastime that can be indulged in with more certainty than any other; but cold, and continual rain may even render coaching anything but pleasant. Of all the months in which to travel on the road, the spring and autumn are decidedly the best. There is one thing that strikes me as remarkable, why, when the roads were closed against the coaches, owing to heavy snow-storms, did they not take them off their wheels and convert them into sleighs? This is done in Canada, Russia, and Germany, where sleighs are in common use during the winter, also in crossing the Alps, Pyrenees, and Rocky Mountains. By converting a carriage into a sleigh when there is deep snow on the ground, a perfectly useless machine, and one to which progress is impossible, becomes endowed with entirely new characteristics, since it can pass in safety and with expedition where the wheeled vehicle finds progress impossible. Had this been done, coaches would never have had to be abandoned as described, neither would there have been any delay in their arriving at their destination. Considering the amount of traffic there was on the roads in those days, the snow covering the road would never have become soft enough to be unfit for sleighing. A drift occasioned suddenly by a high wind never extends far, and with the assistance of labourers can easily be removed sufficiently to allow of the passage of a coach. I admit that upon a road where there is no considerable traffic, the snow may lie so lightly as to be unfit for sleighing. At the present

day all the best London coach-builders have some knowledge of how a sleigh can be constructed. A sleigh is after all nothing but two big skates, similar to those worn when skating, attached to the under part of a carriage and turned up both behind and before. Without any serious injury to a carriage it may easily be converted into a sleigh, even by a village blacksmith in remote country villages, by substituting two strong angles or T irons with the flat part undermost. To the part of the iron which rises vertically at right angles to the flattened portion, strong stays may be riveted or bolted, the other end of which may pass under the carriage and be fastened thereto, in addition to which a stay might pass from one sleigh-iron to the other, both before and behind the under body of the carriage.

Mr. Harris very sensibly remarks, that "for teaching a man to drive and making a coachman of him there was nothing like night-work." This is certainly the case, as on a dark night with a badly-lighted coach, the attention of the coachman is kept far more alive than in the daytime. I have driven hundreds of miles myself of a night, and have the misfortune to be what is called night-blind. This may appear rather an anomalous term, since no one can see in the dark like they can in the light, except they be cats; yet there are some people who see in the dark far better than others, although their sight is not particularly good in the daylight. This is particularly the case with seamen, as I have frequently observed when at sea. I have often on dark nights tied a handkerchief or a piece of paper to the leaders' traces in order that I might see whether they are working or no; for by the mere feel of the reins it is im-

possible for anybody to know this unless he is blessed with sight that will permit him to see almost as well of a night as during the day. I have driven tandem when it has been so dark and foggy that I have not been able to see beyond my wheeler's head; although my leader was there I have not been able to see him, and, under these circumstances, I have felt like Marcus Curtius, the hero of one of the old legends of Rome, who threw himself fully armed into a chasm which had opened in the Forum, and which the Augurs declared could only be closed by casting into it the greatest treasure of the city. I should qualify this statement by saying that the descent into that unfathomable gulf must have appeared to Marcus Curtius when in the act of plunging therein a rather speculative proceeding; in fact, it was quite impossible for him to say on what kind of journey he was embarking. Had it occurred at the present time he would have been run in by a policeman for attempting to commit suicide. I believe this hero of romance at the moment he took this header was on horseback, which was rather hard upon the horse, who did not share his rider's fanaticism.

As with Marcus Curtius, so it is with coachmen who drive a team in a dense fog on a dark night. It is, to say the least of it, rather a speculative proceeding, since they cannot always tell where they are journeying. Mr. Harris says that an old coachman once told him that, with a coach and four horses, he had driven over eight donkeys in the course of his life, all lying out in the middle of the road. I remember driving once in Sussex with a tandem, when I got off the road, and found myself journeying across a common. I had no lamps, and not knowing how to

get back again on to the beaten track, I gave my horses their heads, and they sagaciously led me back to the road without further mishaps.

Horses, like other animals, see always better of a night than human beings. This is, perhaps, owing to the fact that their eyesight is never injured by artificial light; that, when darkness sets in, long hours in the stable (during which they are left without light) accustom them to see when to us everything would be enveloped in gloom. This being the case, coachmen driving of a night should leave a great deal to their horses, since they have a power of observation which is denied to us.

But to speak of the old coaching inns, these are easily recognisable by their construction. Most of them are entered from the street by a big archway, which divides one part of the house from the other; the part so isolated from the main building is generally the coffee-room. The passengers usually alighted from the coach or mounted thereon when under the cover of the arch, after which the coach continued its way into the stable-yard, which was behind the inn, or upon the first stage of its outward journey. Many of the old inns had a courtyard, round which ran a balcony giving access to the principal rooms. Oak was extensively used in their construction; the rails protecting the balconies and staircases were of oak, as also were the mantelpieces and wainscoting of the best rooms. One frequently sees oak wainscoting painted in old inns. This seems a very great pity, as nothing looks more charming in an old-fashioned room than oak that has become darkened by time; upon observing which, one cannot but think how many

strange scenes must have been witnessed within the walls of such a room.

One of the oldest inns in London was the "Tabard Inn" in Southwark. This is the inn where Chaucer and his compatriots assembled before journeying to Canterbury. Chaucer says of the landlord :

A bulky man he was with eyes set deep,
A fairer burgess is there none in Chepe ;
Bold of his speech and wise, well was he taught,
And of his manliness he lacked naught,
And also was he a right merry man.

Chaucer's pilgrimage occurred in 1383. Three hundred years ago, this inn was in a ruinous condition ; but it was afterwards, we are told by an old writer, " newly repaired, and with convenient rooms much increased for the receipt of many guests." It was afterwards used by the earlier coaches and waggons.

Dr. Johnson speaks of taking his comfort at an inn, and it is difficult to understand why the word "hotel" should have been substituted for the good old English word "inn." Mr. Harris says that he espied the following, duly framed and hung up amongst some coaching pictures hanging in the parlour of an inn kept by an old coachman :

FRIENDLY ADVICE.

Call frequently.	|	Be good company.
Drink moderately.	|	Part friendly.
Pay honourably.	|	Go home quietly.

Let these lines be no man's sorrow,
Pay to-day, and trust to-morrow.

The coaches appeared to have been far more

punctual than railways are at the present time. This was owing in a great measure to their being matters of private enterprise. Although the newspapers nowadays are frequently full of complaints of the unpunctuality of trains, such was never the case with the coaches, notwithstanding the far greater difficulties they had to contend with. If they ever chanced to be late, it was no easy matter to increase the prescribed pace, as it must be remembered that the law forbade their galloping the entire team, or indeed driving at any speed that was dangerous to life and limb. The motto of mail and stage coachmen was, "Keep the wheels moving," and this they endeavoured their best to do, from the time when they sang out "All right, let them go!" and the horse-cloths were whisked off the horses' quarters, until they pulled up for the fresh change that was waiting for them by the roadside.

The number of mail guards in England, Wales, and Scotland was 268, over whom were eight or ten inspectors. The guards received half-a-guinea a week and their uniform, supplementing their salary by tips received from the passengers. The mail guard sat in solitary isolation throughout the night, the luggage and mail-bags on the roof making conversation with the passengers who sat in front an impossibility. To a certain extent a mail guard was to be envied, as he did not have wet umbrellas poked in his face or trickling down his neck. If he took forty winks on his perilous seat, which was remarkably unprotected, the voice of the coachman would be heard calling out, "Blow up for the change! Blow for the gate!" or "Be ready with the skid!" upon which the sleepy guard would have to crawl down from his perch and

adjust the skid ; or, taking his long horn out of the basket, blow a blast on it that, beginning faintly, ended loud enough to wake the most determined sleeper or the most sluggish of stablemen, who, as the coach approached, were found standing in the road with four fresh horses ready and fit to go. Notwithstanding that the days of coaching were the days when horses were most extensively used, yet less attention was paid to stable accommodation and fittings in those days than is now universally the rule ; the manufacture of iron goods had not made sufficient progress at that time to be used extensively in the construction of stables. Architects, too, had not thought it worth their while to study stable architecture, or they thought it beneath their dignity to do so, except it were the stables of some great nobleman or a prince of the blood royal, and even in these stables the improvements which now exist were wanting and the sanitary arrangements were very defective. They were ill-lighted, with low-pitched roofs and narrow doorways. I am myself personally acquainted with hundreds of them ; and there are two, with which I am perhaps better acquainted than others, as they are but a short distance from my house—these are the “George Hotel” at Winchester, and the “Dolphin” at Southampton—both no doubt were called inns fifty years ago ; but, like other places of the kind, they have adopted the new word “Hotel,” which is of French derivation. When you have described the stables of one of these old inns, you have described them all, although some may be more pleasantly situated than others. Bear in mind, I do not refer to inn stables in hunting countries, as in that case the existence of extensive stabling is not due to the coaches, but to the demand for stabling to

accommodate hunters. As regards the old coaching stables, it is difficult to say of what the old drains were constructed, since in those days there was no iron employed in stable drainage, neither were there any glazed drain-pipes, which, owing to the collar, can almost be hermetically jointed, besides having bends and junctions to suit various situations. As for the pavement of these old stables, it is invariably rough pitching, either of pebbles, flint, or Purbeck stone, which is so constructed as to arrest surface drainage, rather than facilitate it. As to the mangers, they were all of wood with old over-head hay-racks and worm-eaten manger-troughs, which, once infected with disease, conveyed it to every horse who fed from the same manger. In place of all this we have now a perfect system of drainage, hard Staffordshire vitrified pavement upon which horses cannot slip, and which is so made that it will not retain water on its surface. We have iron manger-troughs, iron hay-racks, large ventilating windows, and, what is more essential than everything else, width between each stall division, plenty of room behind the horses, and doors of a proper width, through which horses can pass without injury. And then the old yards were vilely paved, and the buildings frequently have neither a claim to architectural pretensions, nor even common sense to plead as an excuse for their erection. Speaking of stables, as I have mentioned elsewhere, the largest stables for coach and post-horses in the neighbourhood of London, were at Hounslow and Barnet.

It has been remarked that if all the people who now travel by rail were to travel by road, what are now almost unfrequented portions of a highway, would

be like the road through Clapham Common on the Derby day, the traffic would be so enormous that it would be almost impossible to drive along the road with any comfort. Imagine to yourself the passengers in a single excursion train turned out on to a high-road and compelled to continue their journey in vehicles drawn by the living and not by the iron horse, and add to these the passengers by one parliamentary, two ordinary trains, and one express, and you will have some idea what the condition of a high-road would be were the same number of persons to travel upon it now as do upon the railway at the present day. I do not think that it is so much owing to the increase of travelling as to the increased population. After all, coaches held very few people, and a post-chaise still fewer. Were every one to travel now on the road as they did then, the demand for horses would far exceed the supply, and yet in these days of diminished road travelling the number of horses employed by coaches on the road appears to us very surprising.

The number of horses quartered at Hounslow, which was the first stage on the great western road, was enormous, consequently Hounslow is always regarded with curiosity by persons interested in coaching ; and, as for the inns, it is interesting to read of them and of the coach proprietors of those days. These queer old inns are gradually being improved off the face of the earth, and are making way for the modern hotel in the same manner as the old coffee-houses gave place to the modern club, and both, I think, are an improvement.

In Lord Lennox's book on coaching there is a very clever parody on Goldsmith's "Deserted Village."

The author's name is not mentioned. The village in this case is Hounslow.

THE DESERTED VILLAGE.

"Quantum mutatus ab illo."

Hail, Hounslow ! primest town upon the road,
Where coaching once in all its glory showed ;
Where careful drivers might be always found
Ready when ostlers called to " Bring 'em round."
The member rattling up at slapping pace,
To ease his conscience, or secure a place ;
The maiden flying from a guardian's rage,
In Hymen's " Union," venturing a stage.
These knew no more of anxious fear or doubt,
When John the ostler cried, " The first turn out !"
Once, Hounslow, there was many a gallant team,
The dragsman's pride, the keeper's fruitful theme.
How dashing they swept up to the well-known door,
Where rest awaited when their task was o'er !
On, sleek of coat and deck'd with trappings gay,
Bounding they met the labour of the day.
Landlord and whip gazed on the thriving trade,
And dreamt of fortunes soon and surely made ;
For them alike both house and coach filled well,
" And all went merry as a marriage bell."

Once it was thus—another age appears,
And Hounslow's smiles, alas ! are turn'd to tears ;
No more is heard the mellow winding horn
Waking the drowsy slumbers of the morn.
No spicy " change " now waits for the down mail,
For, woe is me ! the " Bristol's " on the " rail."
No longer now is heard the busy din
In the full yard that marks the prosperous inn ;
Unheard is now the watching ostler's call ;
The only " pair " is weary of the stall.
Silent the joke of " Boots," ne'er known to fail,
The keeper's whistle and the postboy's tale.
No waiter now bestirs him for the nonce,
To answer fifty summonses at once.
E'en Bessy's self, so long the bar's fair boast,
The cookmaid's envy, and the bagman's toast ;
Whose winning smile was so well known to fame,
That for a ray each traveller duly came ;
E'en she—so hopeless, Hounslow, is thy case—
Hath packed her traps and bolted from her place.

A time there was, ere railroads came in force,
When every mile of ground maintained its horse ;
Coach after coach then rattled briskly by,
"Live and let live" was then the wholesome cry.
'Tis past ! and now succeeds the general doom
Of landlord, barmaid, waiters, ostler, groom ;
The coachman's glories have for ever set,
And "Boots" has got a place—in the *Gazette*.

There were some wonderful old inns in London in the coaching days which have been mentioned elsewhere ; they were the "Bull and Mouth," St. Martin's-le-Grand, close to where now stands the General Post Office, this belonged to Sherman, and the "Belle Sauvage," Ludgate Hill, which belonged to Robert Nelson. The "Bull Inn," Aldgate, belonged to Mrs. Nelson, the mother of Robert ; the "Swan with Two Necks," Lad Lane, the "Spread Eagle," Gracechurch Street, and the "White Horse," Fetter Lane, belonged to Chaplin ; the "Cross Keys," Wood Street, Cheapside, the "Golden Cross" at Charing Cross, and the "George and Blue Boar," in Holborn, were leased by Horne. There were several others, all of which were provided with extensive stabling, although very few coach-houses were used, the coaches generally standing in the open yard. All the mails left London of a night at exactly the same hour, this was eight o'clock, and they arrived at the General Post Office at about the same time in the morning. Mr. Harris in his well-illustrated and well-written book, entitled, "Old Coaching Days," says that the mails for the western part of England all stopped at some West End booking-office to take up passengers and luggage. The West End offices were the "Green Man and Still," the "Gloucester Coffee House" in Oxford Street, the "White Bear" in Piccadilly, the

"Spread Eagle" and "Golden Cross" in Piccadilly Circus. Sherman's coaches nearly all took the northern road except the Exeter and Worcester; he had nine coaches on the Birmingham road. There was another coach proprietor called Mountain, whose inn was called the "Saracen's Head," and was situated on Snow Hill; his coaches also took the northern road, whilst Mrs. Nelson of the "Bull Inn," Aldgate, despatched all her coaches towards the east. Chaplin's coaches, from his three large establishments, went north, south, east, and west. It is interesting to know that Hatchett's, the place from which the "Amateur" road coaches now start, was distinguished in the old days for the number of stage-coaches and mails that stopped there; in fact, the "Quicksilver" mail and the not less distinguished "Tantivy" started from Hatchett's.

The busiest time in the day for these rendezvous was from five in the morning till eight or nine; during the middle of the day the coaching inns were tolerably quiet, except for the day-coaches that ran short distances, which arrived and departed at all hours.

The contrast between the coaches leaving London and those which had just arrived after a long journey was very striking. They were very much like ships; whereas those that have just left dock, bound on a long voyage, are freshly painted, and of smart appearance, the vessel that has just returned from a long cruise, having experienced bad weather, is vastly different in appearance; she has frequently carried something away, and there is a shabby look about her, which is indicative of a rough passage and a long absence from port.

On the night-coaches coming into town, they

would be either covered with dust or mud, and the passengers, if not asleep, frequently looked utterly worn out ; whereas the passengers on the day-coaches out of town, looked spick and span, the coaches were bright and clean, the brass on the harness shone out resplendent, and all spoke of new-born energy and life.

All the great London coach proprietors had stables down the road ; Nelson had one at Hounslow, Chaplin at Whetstone, and Horne had one at Finchley, where a coach called the " Bedford Times " used to make the first change. Chaplin had a large stable on the Brighton road, just beyond Croydon, and Mr. Harris says, " That if you look sharp, just at the right time, as the Brighton train whirls you by, you may see it, but you will scarcely recognise it as a stable, as the stables have all been converted into cottages, which form a square enclosing what was formerly the yard ; it stands about fifty yards from the road, and has large lofts at one end in which all the hay and straw was kept."

As I have said in another part of this book, the roads were formerly much wider than they are now ; almost in every case where grass is to be seen along side the road, that is, between the road and the fence, this was formerly a portion of the road ; if this had not been the case, the fence would have come up to the edge of the road, and the wide grass space which is so frequently seen, and which in hunting countries is so pleasant to ride on when going to a meet or on quitting the hounds, would have been thrown into the fields alongside, and would have been owned by whoever owned the land through which the road pursued its way. The space which we now see on

great high-roads, and which many people imagine was always the same width and never wider, is, in fact, that space which has been deemed sufficient to meet the requirements of the present traffic, which was once upon a time so great, that many high-roads had double turnpike gates, and even then the men had all their work cut out to take the tolls.

What was once the "Swan with Two Necks," in Lad Lane, is now Messrs. Pickford's large establishment. These great carriers, as most people know, transmit goods by railway. In the coaching days, the stabling was under the offices; the horses, when required, used to emerge from underground. This is the case with many private stables in London at the present day, and what is still more remarkable, there are many stables in the West End of London, built during the last ten or fifteen years, in which horses go up an inclined plane, so that there are several floors of stabling with large balconies strongly protected with high iron railings, on which the horses are washed. Close to the "Swan with Two Necks," there was a small shop at the corner of a very narrow street, but the site of this humble establishment is now occupied by lofty offices; the business of the man who lived there was to manufacture coach-horns and bugles. Being near the General Post Office where all the mail guards had to assemble every night, and being near the "Bull and Mouth," and "Swan with Two Necks," he did a very good business. Mr. Harris says: "The variety of size and shape of the horns was remarkable. The long tin horn was not extensively patronised, but probably used by guards on cheap, slow coaches, who did not care about looking smart; then there was the copper horn with a single twist with two sharp notes,

which, when well blown, as some guards could blow, was by no means unmelodious. There was also a copper horn with two twists, and the long copper horn varying in length from about three to four feet or more, with a very narrow bore terminating in a bell shape."

These long, straight horns are those that are generally used nowadays. It is astonishing the number of notes that can be obtained from them. I had a man once in my service who could almost play a tune on one of these horns, and the "Post-horn Galop," and "God save the Queen," can be played fairly well by an expert in their use. Mr. Carleton Blyth's guard, on the Oxford and Cambridge coach "The Defiance," used to enliven Piccadilly with this accomplishment, as the coach made its progress on the first stage of its outward journey.

Mr. Harris says: "In this little shop there was every kind of horn, big horns and small horns, brass key bugles and copper key bugles, large brass and copper horns, bugle-shaped without keys; in fact, there seemed to be in this shop, horns to suit the taste of any guard, even the most fastidious."

This writer, who evidently speaks from experience, goes on to say that being desirous of possessing a horn which he could carry with him when travelling, and could use on a coach to which there was no guard attached, decided to invest in the best he could obtain. He says: "Accordingly I hied to the little shop of my friend the horn-maker, got him to manufacture one to order, and a beautiful little one he turned out certainly; it was a brass horn with two twists, oblong in shape, the bell end flattened, so as to lie in your pocket without sticking out. About five notes could be got

out of this horn. As coaches died away, and I had nothing for my horn to do, it became battered and dented by my children, who nearly burst themselves in vain endeavours to blow it, and was at last surreptitiously smashed in by the nurse-maid, who did not appreciate its good qualities."

Speaking of coach-horns, I have no doubt they are better made at the present day than in the time about which I am writing. The old-fashioned horns were very easily indented, frequently bent, and otherwise injured. Within the last few years they have been strengthened by three ribs of brass running down outside in the direction of their length, the horn itself being made of copper. A horn has also been brought out on the telescopic principle, which closes up when not in use, and consequently fits into a very short case, but when adjusted is of great length.

The best manufacturers of coach-horns at the present day are H. Porter and Co., 30, Charing Cross, S.W., and Köhler and Son, 116, Victoria Street, Westminster, S.W. There are others, but it is with these I am best acquainted.

To turn to another subject, I am reminded that the guards in the old coaching days were great news-mongers, and they were accordingly held in great respect by all who were anxious to know what was going on in the world at large. Owing to the haste with which coaches travelled and the little time the guard had to waste in gossip, what he said was absolute and undeniable. There was no time for question, for objection, or for argument, and the few words which he addressed to the inquisitive group surrounding the coach on its arrival, frequently furnished a subject for conversation between both rich and

poor for hours to come. In villages, what the guard said was repeated in the squire's drawing-room, the vicarage parlour, the village inn, and by the occupants of many a humble cottage. Before the advent of coaches it was the pedlars, the packmen, and the waggoners who transmitted the news. So far as the discussion of the guard's news was concerned, there is little doubt that in the bar of a village inn, under the influence of alcoholic liquids, many trifling incidents were distorted into the most terrible and tragic events.

Speaking of coaches, there is little doubt but that they have greatly improved since the regular coaching days. They could not fail to do so, as coach-building has made rapid strides of late years, and coaches have naturally benefited by this fact. As time progresses, every trade gradually improves, and the same thing applies to the tradesmen employed by a coach-builder in the construction of a coach. For instance, the wheelwright, the smith, the painter, the liner, and trimmer have all learnt something fresh since the days when Englishmen travelled by coach ; so also has the lamp and harness-maker. In fact, although coach-builders and harness-makers are people with very strong Conservative tendencies, yet gradual improvements are always being made in the two important trades to which they belong ; and this is apparent to any one who compares a very old carriage with a modern one, or an old set of four-horse harness with that made at the present time by a first-rate London tradesman. So that to speak of harness or coaches in the old days as being superior to what is manufactured at the present time, is to convey a very erroneous impression to people's minds who are unacquainted with such matters. It is only the roads that have

altered for the worse, and that is not for the want of knowledge, but from want of interest, encouragement, and perseverance.

There is no doubt that in some remote portions of the United Kingdom coaches will continue to run for a great many years yet—that is, in those places where it would not pay to construct a railroad; but a person need not be very old at the present time to recollect well the last of the coaches working on the great main roads, since I see by the *Times* newspaper it was as late as October, 1843, that the London and Bristol coach, the “Prince of Wales,” was taken off the road; and it is still later, in September, 1847, that the celebrated “Quicksilver” mail-coach was withdrawn from the Plymouth and Exeter road. I see that the Bath and Bristol Railway was opened on September 31st, 1840; consequently the coach must have been running at the same time as the locomotive. I am unable to say when the Exeter and Plymouth line was opened.

Mr. Harris says that the stables in the “Bull and Mouth” yard appeared like a small town when he visited them, and the horse-keeper, as he went round with visitors, would enumerate the various teams in the following manner: “Those are the Glasgow mail horses, those are the Edinburgh, those are the Halifax ‘Help,’ those the Worcester night-coach, and those the Exeter and North Devon, or some other night-coach that would leave in the afternoon or evening;” and so on, no doubt, throughout the stable. Every yard varied in the quality and kind of horses employed, each proprietor having his own particular fancy; consequently those who were well acquainted with the various yards could frequently distinguish to whom

the horses belonged by the kind of animals they were. Many of the horses in the night-coaches, although fast so far as appearance was concerned, would not have been presentable by daylight. Many poor old screws who began their life in a crack day-coach, would afterwards, we are told, under the veil of night, be harnessed to the in-coming or out-going mail, and if not good enough for this, would get drafted down into the country to work some second-rate stage-coach running after sunset. It was over the middle ground—that is, between London and some big town to which the coach was bound—where the inferior horses would be employed.

Many of the stage-coaches that ran of a night were very much neglected, as it was presumed they would never be seen by daylight. A writer, to whom I have elsewhere referred, says: "The harness was all smeared over with oil, which, so far as I could ever ascertain, was the only article ever used by the night horse-keeper for doing up or preserving his harness. He certainly believed in oil, and from its constant application, there was a thick, hard coating over all the surface of the leather, into which you might dig your nail. The colour, one must presume, had been originally black, but from the oily accumulation, mixed, no doubt, with some portions of mud and dust, it had assumed a gray or dusky sort of hue by moon or lamplight."

And very wise the horse-keepers of past times must have been, notwithstanding this writer's disapproval of what they did. Oil is an essential and constituent part of good leather, of this I will speak elsewhere in my chapter on harness; sufficient to say for the present, that leather, like the skin of all

animals, is possessed of a large quantity of oil, and when this oil is either washed out of it, dried up, or evaporates, the leather perishes, since it no longer has the power to resist moisture, but becomes harsh and loses all its pliability and wet-withstanding properties.

Both excessive heat and excessive wet are equally injurious to leather; and one can well understand the horse-keepers of the old night-coaches using oil to such an excess, when one considers that the safety of the coach and all on board was dependent on the horses and the harness which controlled them and compelled their obedience; it was exposed not only to heavy night dews, but frequently to snow, hail, and rain.

The same writer goes on to say that, "The territs, buckles, and bits did not exhibit an atom of shine; as for the bits, they were thoroughly rusted all over." For this last-mentioned fault there is really no excuse, as, although bits may rust less quickly when oiled, yet to allow them to remain rusty is only to promote and encourage the act of oxidation, which, in time, destroys the bit altogether. Medically considered, I have often thought that a rusty bit in a horse's mouth must have rather a beneficial effect, insomuch as it must act on the animal's system like steel wine, since steel wine is nothing more nor less than carefully-prepared steel-wire plunged into water and allowed to rust. In fact, all chalybeate springs are impregnated with iron, or, rather, hold iron in solution; consequently, a bit in a horse's mouth must be as good for the horse as steel wine or a chalybeate spring is for a human being, or a rusty nail is when dropped into the trough from which a dyspeptic canary procures his daily supply of liquid.

It appears that inspectors were sent down from London and travelled on the coaches in order to ascertain that all was going on right, the coachmen and guards very rarely knowing whom they had with them ; but if they had any suspicion of the fact of who their passenger was, the changes were never made quicker and the time was never better kept. Sometimes some of the horse proprietors, who generally kept an inn or a livery stable, and who frequently supplemented this business by furnishing funeral carriages, would employ these horses in the mail, which would greatly displease the passengers who had no fancy for being drawn along by these sepulchral-looking animals, with their long tails tied up into knots to keep them out of the mud, and their manes plaited or hanging in absurd ringlets.

Mr. Harris tells a tale of a costermonger who possessed a very mournful-looking donkey. When asked to account for the miserable and dejected appearance of this humble quadruped, he replied : "Yes, sir, he is a werry miserable ass. He've bin a-standing 'twixt two mourning-coach 'orses for a fortnight, and he ain't rekivered his spirits."

The guards of the old coaches were always provided with spare gear in case of accidents, and a number of tools, which, if not in a chest, were in a tool-basket or huddled away somewhere in the boot ; then there were spare traces, spare bars, and various items of harness serviceable in an emergency ; one thing was scarcely ever omitted, and that was a spare collar. In addition to this, in the earlier days of coaching, was a huge, bell-mouthed blunderbuss which carried an immense quantity of round shot, and was like a small cannon as regards size ; in fact, it was

a veritable arsenal of itself when loaded to the muzzle.

The plan for stopping the coaches was a very simple and yet a most successful one; it was by placing a rope across the road from side to side, this sufficed to throw down the leading horses. All then was in confusion; the guard jumped down to render assistance, whilst a highwayman, more nimble or with greater presence of mind, hurried to the back of the coach and secured his terrible weapon; consequently resistance on the part of the guard was frequently met by the muzzle of his own blunderbuss being pointed towards him. Whilst this was going on, another highwayman has cut the traces, uncoupled the horses, and secured the coachman, after which, the mails and whatever valuables chanced to be on the coach fell a prey to the robbers. If the coach was loaded with passengers it was rarely attacked; but if it was then attacked, the number of highwaymen were so increased as to render resistance unsuccessful.

But to turn to other matters. A great deal of care was required in putting horses to; the fresh teams when brought out had to be placed behind the spot where the coach pulled up so that they might walk straight into their places without being turned round. For these quick changes, which, on all occasions, occupied less than five minutes, it was necessary for the coachman and horse-keeper to make close and careful observation of every atom of harness, and this had to be done very quickly and yet with great precision, as a very trifling omission might give rise afterwards to great delay, if not to a serious accident, and this was more essential in the dark than in the light; consequently the reflection from a bull's-eye lantern

had to be thrown on to every particle of the harness, when the experienced eye of a good coachman could at once detect anything wrong. It must be remembered that in those days there was no break ; and the iron shoe or skid is a very clumsy contrivance compared with a break. It necessitated a coachman or guard descending from his seat to apply it, and also the stoppage of the coach and the consequent delay. This being the case, it was rarely used except on very severe hills. Although very many wheel-horses are spoilt by the too frequent use of the break, yet an immense number of accidents are averted by its being used, and had this apparatus been in use during the days of coaching, it would have proved an inestimable boon. In fact, with a heavily-laden carriage of any kind, it acts as a safety-valve does to a steam-engine, as it provides an element of security, owing to the ease with which it can be applied and removed.

If coach-horses were ever to run away with a coach, which is rarely the case, owing to the weight of the vehicle behind them, a powerful break applied by a strong man immediately renders their progress at any great speed a matter of exceeding difficulty. I cannot say to what extent it increases the labours of draught or retards progression, but I should suppose that it would treble or quadruple the load. Accidents however, are not always to be avoided by stopping a vehicle, an axle may break or a wheel come off on a level road, or when ascending a hill which could not be prevented by the use of a break. There is one predicament in which a carriage may be where a break forms an important factor in preventing an accident, this is when a pole breaks on descending a hill, in which case there is only one thing to do,

keep the horses going and apply the break.* One might go on writing of the various coaches for any length of time, as there is no end to the information that can be acquired upon this subject: but I feel disinclined to do so, not having lived in the days of coaching, and knowing as I do how very many books of a superficial and anecdotal character have been written on coaching. As this book is intended to be upon driving and all connected with the road, I could not ignore a subject so vastly requisite to a true and comprehensive history of highways and horses, although I am anxious to pass on to matters in which I feel sure the present generation, like myself, will evince greater interest.

Captain Haworth in his book "Road Scraping," says that the weight of a mail-coach was one ton; but it often weighed much more than this. It was painted red, and had the royal arms very conspicuously emblazoned on its panels. It carried four persons inside and four out, besides the guard and coachman; on the roof were thrown the mail-bags, and the luggage of the passengers was frequently placed inside a huge basket, as I have mentioned before. The guard always carried pistols or a blunderbuss as a protection against highwaymen. I am, of course, speaking of the early coaches, not of those of later date, close upon the introduction of the locomotive. Tenders for horsing the mails were invited at the expiration of the contracts which were generally entrusted to the same person or persons. Mr. Vidler, of Millbank, Westminster, was the contractor who supplied the mail-coaches. He used to receive from the pro-

* A break may be applied to a coach when the horses are resting during their ascent of a steep hill, as it prevents the coach running backwards.

prietors who horsed the mails so much a mile for the use of the coaches, which the Postmaster-General forced the coach-proprietors to procure from him under the contract entered into. Mr. Vidler, in addition to charging proprietors so much a mile for the use of the coaches, received £500 a quarter or £2000 a year for grease and oil to be used on the mail-coaches, the grease for the boxes of the wheels and the oil presumedly for the lamps, which were as a rule four in number, two large side lamps, one dash lamp, and one bull's-eye lantern, used by the guard when sorting his letters and parcels. Besides this, Mr. Vidler used to send in a bill for repairs and accidents.

Mr. Harris says that the sum paid to him for the ten years prior to 1835, was £32,900; after this, the contracts of which, before Mr. Vidler had the exclusive monopoly, were thrown open, and the country broken up into districts, one of which was taken by Messrs. Wright and Horn, large coach-builders in London, whilst the Western district was taken by Mr. Williams, a well-known coach-builder at Bristol.

A style of coach, utterly different to the old mail, was then introduced. This, I learn from a writer on the subject, was selected by the Postmaster-General from a number of designs submitted for his approval, and this new style of coach continued in use until the mails were taken off the road.

All the four-horse mails were of one size and pattern, so that wheels, nuts, screws, axles, and other parts intended for one coach would fit another equally well; but everything, with the exception of the gorgeous colour and the brilliant gilt lettering of the royal arms and initials, was of the plainest description.

The writer, to whom I have referred, says that a mail-coach of the old style cost 140 guineas, and that in seven years' time it would cost in repairs the same amount. "As is the case with railway rolling-stock, the wear and tear depended very much upon the pace at which the coach travelled. But one coach," he goes on to say, "was, as a rule, provided for every hundred miles, in the same manner as one horse was deemed requisite for every mile." Thus, between London and Bath, one coach would work up whilst another worked down, whilst a spare one was kept somewhere in the event of accident.

Mr. Harris assures us that the profit reaped by the Government on the conveyance of letters by coaches, exceeded £2000 a year. As regards horsing the coaches, sixpence a mile was paid for horsing the Holyhead mail, but this was afterwards reduced to twopence. This was the average rate for horsing mails out of London; one advantage, however, mail-coaches had over the stage, they paid no turnpike tolls; the fact of their carrying the royal mails, exempted them from any such duty.

The fare for a journey of a hundred miles outside a mail-coach was eight shillings, and twelve shillings for an inside passenger; but their punctuality procured them a class of passengers who did not mind paying a high fare for travelling upon what was considered an exclusive conveyance.

The coachmen employed to drive mail-coaches out of town, did not, as a rule, go beyond a distance of thirty miles, and the coach proprietors having their offices, stables, and inns in the metropolis, very frequently did not horse the mail-coaches beyond a certain distance out of town, although their own

stage-coaches were of course horsed by them for the entire distance. All these large coach-proprietors, were, in fact, job-masters.

The Post Office arrangements appear to have been very singular. In order to convey the mails, the Postmaster-General paid a fixed sum to certain coach and horse proprietors, such as Horn, Sherman, Chaplin, and Nelson, who contracted for the job. At the same time, the Postmaster-General, owing to previous arrangement with Mr. Vidler, forced the coach and horse proprietors to procure their coaches from him, which they were forced to do, having to pay Mr. Vidler a certain sum for the use of the coach, each proprietor horsing the coach for a certain distance only, and being responsible for a portion only of the sum paid to Vidler; so that, in fact, the coach was leased by a company of horse proprietors, who were paid by the Postmaster-General for conveying the mails. The guard was the servant of the Post Office; but, although the coachman went the full distance, or over ground horsed by several proprietors, I am unable to say whose servant he was. The custom adopted now in carrying mails is for the Postmaster-General, under a contract, to pay a railway company, or a company of ship-owners, a certain sum yearly for the conveyance of the mails. I am unable to say how it is arranged when letters are transmitted to foreign countries; but it is not necessary to consider this question. Horn horsed the mails from London to Gloucester, Dover and Hastings, for twenty-eight, thirty-six, and fourteen miles respectively. Chaplin horsed the London and Bath, Norwich, Hull, Bristol, Liverpool, Holyhead, Manchester, and Devonport mails, but in no case did he do so for more than forty-eight miles out o

town, neither did Sherman, who horsed the London and Worcester, Exeter and Carlisle mails. Coach proprietors frequently worked mail-coaches in unison. Mr. Harris says that Horn, who was not the largest proprietor in London, used to pay annually to Government £25,000, and £6000 a year to Wright and Powell for hire of coaches; and this did not include all, as he had some from other builders.

A coach running from a hundred to a hundred and twenty miles, might be calculated to earn from £18 to £20 a night. If this was the case, and if, as it has been said, a coach cost 140 guineas only, it appears ridiculous that the Postmaster-General did not purchase the coaches right out, and merely contract with horse proprietors to horse them, as the price paid by the coach proprietors for the use of the coach must have very soon mounted up to the actual price of the coach.

A hundred and seventy mails and stage-coaches passed through Hounslow in every twenty-four hours; more horses stood at Hounslow than at any other village in England. Next to Hounslow, Barnet had by far the greatest number of horses; this was the first stage out of London on the great north road.

The agreements entered into between the Postmaster-General and horse proprietors, when committed to writing, were very lengthy and voluminous. I presume that the coachmen were the servants of the horse proprietors, since fines were inflicted on them and on the proprietors for not keeping time, although the coachman had to drive over such space of ground as was ordered by the Postmaster-General.

Nelson, Sherman and Chaplin were the largest proprietors of coach-horses. Captain Haworth de-

clares that Chaplin had one thousand seven hundred horses engaged in coaching ; he used to dine his coachmen once every year, and at this dinner he presided himself. A mail-coach was always expected to have its lamps lit after sunset, just as ships at sea are forced to carry lights, when the sun sinks below the horizon. On the King's birthday, all the mails used to go in procession, the guards and coachmen all in their new scarlet liveries, the horses with new harness, and frequently decorated with flowers, in this manner they promenaded the principal streets of the metropolis. Mail-coachmen used to drive great distances. The writer to whom I have made reference says that a man named Ward drove from Hounslow to Bagshot, at which place he relieved the London coachman, he returned with the up-mail, leaving Bagshot at 3 a.m. doing sixty miles a night ; this he did for seven years. Another coachman, named Harbridge, drove the Manchester mail for two years out of London, performing one hundred miles every night.

There is one thing to be said about the lives coachmen led ; they could not have been wholesome—although so much time was spent in the open air—since they had to sit for hours in one position, without any chance of obtaining exercise to restore their circulation, in cold weather. Although enveloped in big coats and numerous wraps, they must have suffered terribly, and in order to infuse some warmth into their bodies, they frequently drank to excess ; this, coupled with the long hours of partial inactivity, predisposed them to ill health and disease. Captain Haworth says that many of the coaches would earn from five to six pounds a mile per month ; and

if fodder was not too high a price, three pounds a month per mile paid all expenses. The profits of a coach were divided monthly; the mails had neither duties nor turnpike-gates to pay, since they were the property of the Crown.

Parcels were charged twopence, and were the source of considerable revenue. Articles of value were registered and insured.

A strange thing happened to the Salisbury mail when upon its journey from London to Exeter. One dark night, whilst passing through Salisbury Plain, the coachman saw what he thought to be a big calf trotting beside his leaders. The horses became very restive, and the coachman had some difficulty in handling them. Suddenly the supposed calf made a spring on the back of one of the leading horses. The guard thereupon evinced great pluck; he sprang down from his seat on the coach, and with a pistol he shot the animal dead. It proved to be a large lioness that had escaped from a travelling caravan; she had previously attacked a horse in a carrier's cart, which she killed and mutilated.

Exeter was a great stopping-place for coaches working through to the West of England. About seventy coaches left that city daily, Sundays excepted: the Launceston, Bath, Truro, Plymouth, Dorchester, Falmouth, and London. The London mail was called the "Quicksilver;" it was one of the fastest coaches in England, as the Exeter mail train is one of the fastest trains out of town at the present time. This coach used to perform the journey, one hundred and sixty-six miles, in twenty hours, provided the weather permitted such fast travelling. This mail was driven out of London by Charles Ward, lately the proprietor

of a livery yard in Knightsbridge. He left the "White Horse" cellars at eight o'clock every evening; but after a time Mr. Chaplin removed his offices to Regent Circus, and it was from there the coach afterwards started.

The railroad does not seem to have penetrated to the far west so quickly as it did in other directions about England; consequently coaches continued to run until a very recent date in the West of England. Coachmen who had been driven off the road elsewhere by the advent of the railroad and the locomotive, flocked to the west, amongst whom were four noted coachmen, named Johnson. They were four brothers, sons of a tailor at Marlborough.

The "Telegraph," a celebrated Exeter coach, was first put on the road by Stevens, proprietor of an inn in London called the "Halfmoon." This coach left Exeter at 6.30 a.m.; the passengers dined at the "Star" at Andover, and reached Hyde Park Corner at 9.30 p.m., doing the one hundred and sixty-five miles in fifteen hours, including stoppages.*

A writer, of whom I have before spoken, observes that a stage-coach was excellent property in those days. The "Quicksilver" and Dorchester mail alone paid the rent (£1200) of the new "London Inn;" the profits of the "Quicksilver" mail, which ran from London to Exeter, was £1000 per annum; but the profits of the Dorchester mail only £200.

Haworth, in his "Road Scrapings," says that the mails from London on the second day of each month were frequently behind time, being loaded with magazines and periodicals; and at Christmas and Easter the coaches were heavily loaded with parcels containing presents; and when the shooting season com-

* See pages 73 and 76.

menced, not only were sporting dogs frequently conveyed by the coaches, but a great deal of game was conveyed by them also.

The largest coach proprietor in the high days of coaching was William Chaplin ; he had offices in the City and at the West of London. It is said that he was originally a coachman himself, though later on in life he was elected M.P. for Salisbury, and after the coaches were swept off the roads, like a sensible man, he did not foolishly endeavour to perpetuate their existence, but became connected with railroad undertakings, and eventually became deputy chairman of the London and Southampton Railway Company, afterwards the London and South Western Railway ; in addition to which he established a great general carrying business ; he was associated with Benjamin Worthy Horne. Under the name of Chaplin and Horne this firm is known at the present day, although few persons are aware that the original partners were in the coaching days the largest horse and coach proprietors in England, which means in the whole world.

After the railways were commenced, Mr. Chaplin's extensive stables were converted into warehouses for goods in the course of transmission. Of the eight mails that left the West of London every night, all except the Gloucester and Exeter were horsed by Chaplin ; they all started from Piccadilly. Chaplin also horsed the mail-carts, which, driven by the mail guards with their letter-bags, etc., left the General Post Office every evening to meet the coaches in Piccadilly. For this service he charged thirteen pounds to each mail, the horses in the carts were fast roadsters, as of course the mail-coaches could

not start without the mails, and the guards in charge of them had therefore to be extremely punctual in their attendance. Mail-carts now take the mail-bags in exactly the same way to the principal railway stations.

Twenty-seven mail-coaches left London every night. Fourteen of these were horsed by Chaplin; they went to Norwich, Holyhead, Devonport, Liverpool, Manchester, Bristol, Halifax, Hull, Portsmouth, Bath, Dover, Southampton, and Poole, Stroud, and Wells. When he did not personally supply the horses, he employed a sub-contractor to do so. He had two hundred coaches; he had another establishment in Gracechurch Street, called the "Spread Eagle," but it was not so large as the "Swan with Two Necks." The Kentish and Surrey coaches started from Gracechurch Street. Chaplin owned three of the fastest coaches out of town, the Bristol, Devonport, and Holyhead. These started from the "Swan with Two Necks," Lad Lane, Wood Street, Cheapside—which was once called facetiously "The Wonderful Bird," Boy Lane, Timber Street, Reasonable Place. The next largest coach proprietor to Chaplin was a Mr. Sherman. He is said to have been a member of the Stock Exchange. He married three old ladies one after the other. He rebuilt a famous old inn called the "Bull and Mouth," where he constructed very large underground stables. He was also a large proprietor of vans and waggon, which started from the "Oxford Arms Inn," in Newgate Market. The "Bull and Mouth" was exactly opposite the General Post Office, at the end of Aldersgate Street. Sherman had five coaches running to Birmingham; this he eventually increased to nine. He was the originator

of the long-distance coaches. He never drove a coach, like Chaplin, and rarely, if ever, travelled on them himself. He used to drive about the City in a chaise with yellow wheels, in which he drove a fat pony with double reins—evidently for fear it might run away ; this it never offered to do, being extremely docile and quiet.

There was no appearance of the coachman about Sherman. He had a clean-shaved face, except for a big moustache ; but in manner and appearance it was difficult to believe that he was a man engaged in a very extensive business operation, such as coach-proprietor on an enormous scale, or that he was in any way connected with the road or with horses.

In those days, coach proprietors and those interested in coaching, frequently affected a horsey appearance, which immediately identified them with the road, they wore big fawn-coloured coats of box-cloth, with white pearl buttons, and countless graduated capes like one sees in the old coaching pictures, a blue scarf with white spots enveloped their necks, and as for the hat they wore, it was generally a low-crowned white beaver. Sherman affected nothing of this kind ; but, so far as appearance went, looked as though nothing was further from his thoughts than horses or coaches, although his capital was invested in them.

Sherman's coaches carried all the Scotch mails ; he horsed the Edinburgh and Glasgow coaches, he also had a coach called the "Wellington," that ran from London to Newcastle ; he had another coach which was started long before he became connected with coaching—it was called the "Subscription," and ran from London to Exeter ; this coach first com-

menced running in 1819, and continued until the coaches were set aside by the locomotive. When first started, it used to take twenty-five hours to perform the journey, but as the roads improved it took less time, until at last it was as swift as the others.

When railroads began to be established, Sherman did not evince the same foresight as Chaplin, he stuck to his coaches in spite of the daily decreasing traffic on the road. And it is said that the Chairman of the London and Birmingham Railway, Mr. Glyn, was treated by Sherman in such a manner when he made overtures to him with regard to the transfer of his carrying business from the road to the rail, that arrangements were come to with other coach proprietors; he afterwards did business with the Great Western, but it is generally understood that by his pertinacious clinging to the road, he threw away the chances that were offered to him of becoming a large railway-carrier, like the more fortunate and more far-seeing Chaplin.

Another large coach proprietor was Mr. Benjamin Worthy Horne; he had three coaching inns, and had coaches running in almost every direction. The shortest distance to which he ran a coach is said to have been to Dorking, which was only twenty-five miles. He horsed four mail-coaches, the Gloucester, Chester, Hastings, and Dover. He also horsed and ran the Dover auxiliary mail leaving London on Tuesday and Friday and carrying the Continental mail-bags. If this coach was in Dover when the boat arrived, it carried the mails on to London; but if it had left, then the mails were forwarded by mail-cart, since this coach was in reality only an ordinary stage-coach. When reading of these days and talking them over

with those who have a distant recollection of them, I often wonder why it was necessary to employ a coach to carry mail-bags, and why fast and light mail-carts would not have done far better. The stage-coach business might have been utterly distinct from the conveyance of the mails, and as the mail-coaches travelled of a night, they were never very popular as travelling conveyances, although faster than the generality of stage-coaches.

Amongst the large coach proprietors was a Mrs. John Nelson; she was the widow of one John Nelson, who was the landlord of the "Bull Inn," Aldgate, until his death, when his widow carried on the business with the assistance of her two sons, John, who helped her in the business at home, whilst George was coachman to the Exeter night-coach, the "Defiance," her son Robert being the proprietor of the celebrated "Belle Sauvage Inn." Robert had about 400 horses and a lot of coaches, amongst which were some of the fastest and most fashionable ones of the day; but he only had one mail-coach, that was the London and Norwich. It seems strange that Robert Nelson should have been in such a large way of business, and that his brother George should have been content to drive the night mail to Exeter.

Mrs. Nelson's coaches ran into the Eastern Counties, but she had some running elsewhere; for instance, the celebrated coach, "The Telegraph." This was a day-coach, and started at cock-crow from the "Bull Inn." Mrs. Nelson herself was up with the lark and was always to be found at almost any hour, cheerful, active, and bustling. The "Bull Inn" was a very large establishment, and a very prosperous one. She could accommodate over 150 visitors, besides

which, about thirty of her coachmen and guards were lodged in the house. They had a sitting-room especially set apart for them, where they dined and passed their evenings ; in this room they used to entertain many celebrities, men of birth and title, who took a strong interest in coaching, and were themselves famous whips. Mrs. Nelson used to give her coachmen and guards a dinner once a year, which lasted for three days in order that all her men might participate in it. Had the dinner been on one night only, many of the guards and coachmen would have been away with their coaches. We are told that some of these guards wore red coats like the mail guards. With this account of Mrs. Nelson, I think I may bring these remarks about coach proprietors to a close.

Just as stage-coaching became perfected, and the roads were beginning to be works of art, then George Stephenson's success with the " Rocket " caused a new departure, and the locomotive became the chief motive power. Since then the old inns have been decaying away, the roads have become neglected, and, as for the horses, daily numbers are sent abroad, whilst there does not appear to be a sufficient number of fresh ones to take their place. To those who love horses this is a sad and alarming fact ; and it is certainly imperative that Government by legislation should put a check to such a ruinous state of things, otherwise England, that has always stood unrivalled and pre-eminent for the breed of her horses, will be cut out by continental nations, and it is to them eventually that we shall have to go to replenish our stock. To speak once more of the coaches ; the punctuality of some of them was so great that people used to set their watches by them as they arrived in a town. Unhappily the same thing

cannot always be said of trains, notwithstanding that whereas their efforts are merely mechanical, the punctuality of the coach was dependent upon physical power, and a thousand things that no skill of man could foresee or overcome, heavy snow-storms, roads frequently flooded, and other hindrances to progression. On one occasion a Mr. Kenyon is said to have beaten a celebrated coach with his post-chaise. The name of this coach was the "Wonder," from Shrewsbury to London. This gentleman is said, just before starting from Shrewsbury, to have told his head post-boy that he should like to beat the coach. The post-boy said he would try his best, and he actually got into London before the coach. This coach was one of the most celebrated on the road. Of course the post-chaise had four horses, which were changed at the end of every ten or twelve-mile stage, and so it was not a surprising feat, particularly as a post-chaise is lighter than a coach.

For those who are fond of driving and like horses, a more pleasing sight could not have been witnessed than one of the royal mail-coaches, with its four gray horses going well up to their bits, driven by a noted coachman, with a guard in scarlet and gold, making music on his big horn and waking up the sleeping villages through which the coach passed, all eager to catch a glimpse of the mail. When trains start, people do not as a rule go to the station merely for the pleasure of seeing them off; they either intend to travel by them, meet or bid good-bye to some friend, or have some business to perform. But this was not the case with the coaches; people used to frequent the great coach-yards in London merely to see the coaches start; and we are told that quite

a crowd used to congregate at Hyde Park Corner to see the coaches go by, as they do now at the White Horse Cellars; but it is a vastly different thing playing at coaching as they do at the present day, to making it the business of a lifetime, and to know that, come fair or foul, we must undertake a long wearisome journey, exposed to the inclemencies of the weather. Although coaching in fine weather must have been delightful, yet it cannot in bad winter weather be compared with the luxury of a speedy transition to one's destination in a comfortable first-class railway carriage, with a warm rug over one's knees, and the latest periodical literature lying on the seat at your side.

The engine-driver has taken the place of the coachman, and the railway guard the place of the mail and stage-coach guard. As for the guard on a mail-coach, he was the servant of the Post Office, although he had to make out the way-bill, collect the passengers' fares, and render assistance to the coachman when he needed it. The mail guard of the present day still travels with the mails, but he never has anything to do with the passengers, his duty being merely to take charge of the mails; but the ordinary guard of a train acts towards the train and its passengers in the same manner as did the guard of a stage-coach, except that he does not collect their fares.

Guards and coachmen in the old coaching days used to be heavily tipped by the passengers. In consequence of this they did not receive a high salary from the proprietors.

For a proprietor to put a coach on the road in the old days was an expensive matter; the turnpikes alone frequently cost over £10 a mile each month, besides

which there were heavy taxes to pay, £5 for each coachman and guard and £5 for the coach, making £15 even in cases where only one guard and coachman were requisite. On long distances, where coachman and guard went off duty and were changed for fresh ones, the tax was of course doubled ; then there was a further duty on the coach which was sometimes fixed at threepence a mile. In addition to this there was the cost and depreciation in horse-flesh, bills for fodder, shoeing, stable accommodation, harness, clothing and veterinary surgeon's attendance. Offices had to be established from which a coach started, and where persons were booked, and there were inns to accommodate passengers ; these frequently belonged to the coach proprietors. The fares were very heavy, far more than on the rail ; so that on the rail, not only is the journey completed in less time and in more comfort, but at a far more moderate rate. In the days of coaching, only well-to-do people could afford to travel any distance, whereas now, almost any one can travel, and with more comfort and more expedition. And yet Englishmen who are good coachmen, and who delight in handling the ribbons, naturally desire to perpetuate the memory of the coaching days. It is with a view of reviving in a manner the old-fashioned coach that the Four-in-hand and the Coaching Clubs were instituted, and after this amateur coaches were placed on the road during the summer months, starting from the White Horse Cellars, Piccadilly, and running their stages just like the old-fashioned coaches, but with this difference : they are playing at coaching, whereas the famous old coaches of days gone by were in real earnest. Nevertheless we wish all success to this revivalist movement, and may it long prosper ; may all

classes of society give it their support, and by doing so lay tenacious hold to one of the very best and most manly accomplishments of young Englishmen—the driving of a four-in-hand coach. People are apt to remark, who have no sympathy with such tastes, that a man, to be a coachman, must be of an inferior scale of intelligence; but it is a mistake to suppose this is the case. To be a good coachman requires great intelligence and quick observation; a steady eye, a firm hand, and a bold heart are positively requisite to success.

Each guard on a mail-coach carried a timepiece provided by the Government, on which was dated the time the mail left the General Post Office, and on the coach arriving at its destination, he had to give in his time-bill and also his timepiece, which was so constructed that he could not meddle with it. If the coach was only a few minutes late, a Post Office inspector would be sent down to inquire into the cause of the delay. This strict punctuality caused coachmen to regard horses with very little compassion. They knew that any pity shown to any particular horse who exhibited signs of exhaustion must be firmly locked up in their own breast, and however much they might sympathise with the animal's distress, that it would never do to slacken the pace of the coach. Mr. Harris says that he was told by an old gentleman whom he met at Willesden Junction, that "one hot summer eighteen horses dropped down dead in the coaches somewhere between Grantham and York." An instance of overwork happened in the Bristol and Liverpool mail, which the same writer says travelled at a terrific pace, the greater part of the journey being performed in the night. An old steeple-chase horse

running leader in it suddenly dropped down dead. He was dragged to the side of the road by the guard and coachman, who then got his clothes off (meaning his harness), and the mail continued its journey with three horses only. For the sake of the horses we ought to be glad that coaching is over.

In the days of coaching there was no Society for the Prevention of Cruelty to Animals, and when we consider the vast number of horses that were made use of, and the imperative necessity for keeping time and pushing forward at all risk and at every hazard, we may be certain that consideration for the horse did not occupy a large space in the minds of the coachmen or horse-keepers. Yet in those days, of course, there were certain limits or bounds beyond which it was not practicable to work a horse ; but when it could be done without pecuniary loss or accident then the horse was used, although it might be hastening the end of an old and once valued servant, who, had he been nursed and carefully treated for a few weeks, might have been restored almost to his pristine vigour.

When horses are used by private individuals, or when a small tradesman has a horse in his employ, frequently the animal is regarded by its owner, or by him to whom it is confided, with a feeling akin to affection ; but when the horse merely forms one of a large number engaged in some vast commercial enterprise, the identity of the animal is lost amidst so vast a throng of equine companions ; and sickness attacking or injury occurring to any one single horse is regarded as a matter only entailing loss of money, and the poor animal is draughted, doctored, or put out of the way, without awakening compassion or occasioning sorrow to any one. As to no one, in such cases,

is the care of this particular horse confided, he passes through too many hands to become a special object of solicitude.

We are told that some of the draymen in the large breweries take a great pride in their magnificent horses, and entertain a genuine affection for them; such is frequently the case with railway employés, who have charge of horses engaged in shunting trains or moving trucks to and fro at various termini and junctions. But these and various other instances are where men have had an opportunity of becoming actually acquainted with a horse, when, imperceptibly though surely, the animal gains a hold on their affections and secures kind treatment. But a London cab-driver, a caretaker of ponies in the vast coal-mines of the North, a London omnibus-driver employed during the day to drive several different pairs of horses, and more particularly the coachmen of the old coaches in days gone by, have and had no opportunity of knowing the animals they drove, except as fast or slow, willing or sluggish, quiet or the reverse; they are and have ever been regarded as machines that are necessary to progression, to maintain which the whip of the coachman has frequently to be used.

Four years was considered to be the limit of a coach-horse's employment on the road. If we take a horse's life (during which time with care he can be made serviceable to man) as from fifteen to twenty years, it seems sad indeed that for four years only of this period he should be in the condition of health and vigour requisite for doing the fast work he was called upon to perform when harnessed to a four-horse coach. It is a very great mistake for people to use a horse when too young; to use a horse under five years

is to ruin and destroy in a great measure an animal who is as yet uninjured and without blemish. Whoever does so is guilty of a very foolish act ; he is behaving like the child who is anxious to observe how the seeds he has planted in his strip of garden ground are advancing, and digs them up in order to see what progress they are making ; possibly if cast back into the earth they may yet come up and to a certain degree flourish, but not as they would have done had they been left undisturbed. It is only patience and care that is requisite, and it is these two things that are wanting ; wisdom and carefulness being absent, the mind of the child is uncontrolled, whilst impatience suggests to him an act of stupidity. So it is with horse-breeders and owners, they will not wait until the animal is five years old, and yet in the end they lose by their impatience. I will make this the subject of a special chapter further on. All I can do now is to beg and pray that my readers will never use a horse and subject him to regular work until he has passed his fifth year.

Mr. James Payn, in a volume of essays lately published, commences his first chapter with a description of horses relieved from the burden of their harness, which is rather amusing and decidedly well written, although he commits the very serious fault, which I attribute entirely to ignorance, of saying that horses are not sagacious. In my opinion there is only one animal that equals the horse in intelligence, and that is the dog. If horses, owing to the fact that they are used merely as beasts of burden, should display no great intelligence, it is because their brains have not been sufficiently educated, and consequently they have had no opportunity of exhibiting any particular clever-

ness. Children, horses, dogs, and plants are all affected by the treatment they receive. We speak of a highly cultivated person, and the same term may be applied with equal reason to vegetable growth. All living things are capable of cultivation, and the brains of animals, human or otherwise, are decidedly capable of improvement. Any one who loves horses and has been intimately acquainted with them, knows that a horse can be taught to do almost anything, and the tales illustrative of their wonderful intelligence and sagacity would, were they collected, more than fill the largest volume ever printed.

Mr. Payn, in his amusing little essay entitled, "Out of Harness," which is in reality about men and not about horses, speaks in the first few lines about horses as follows :

"When horses leave the shafts they have various ways of accepting the gifts of leisure and liberty. Some, with drooping ears and staggering gait, repair forthwith to their stables and go to sleep (I am credibly informed by equine friends) standing. This is a case that has no human parallel.

"The behaviour, however, of many of these animals on leaving work, is similar enough to that of mankind under the like circumstances. Some rush at once to drink; some instantly begin to browse, and never seem to have their fill of flesh (for flesh is grass); some kick up their heels, and hinny an invitation to the fair sex to join in their gambols.

"These creatures, like the majority of mankind, appreciate a holiday. On the other hand, there are some who, when once the stage waggon or the omnibus ceases to thunder at their heels, appear to have no *raison d'être*. When their cumbrous harness

has been removed, they shiver and stand abashed as if overcome with a sense of indelicacy. They stretch their necks (astonished that they can stretch them) this way and that, and poke their moist cold noses into stray substances with a puzzled air. Their time is their own; but what on earth, they say to themselves, as they lay their long, not very sagacious, heads together, are they to do with it? Their occupation is drawing, and that gone, they have no other accomplishments. They see their fellow-creatures rolling on the earth with their four legs in the air, a proceeding which strikes them as ridiculous without being amusing. Such high spirits are inexplicable to them; they are old stagers, and when they are off the stage they lag superfluous."

It is a singular thing that so many of the old coaches should have been called the "Telegraph," as it was not till the 25th of July, 1837, that the first experiments were made with the electric telegraph, between Euston Square and Camden Town stations; the London and North-Western Railway Company having sanctioned the laying down of wires between those places, immediately upon the taking out of the patent by Messrs. Wheatstone and Cook. Besides these two operators, Mr. Fox and Mr. R. Stephenson were present to witness the infant triumphs of this wonderful invention.

Wheatstone, who was knighted by the Queen in 1868, had long been a Professor of Natural and Experimental Philosophy at King's College, and had been associated with Cook, who was also knighted on November 11th, 1869, in the perfecting of electric telegraphic apparatus; although the late Professor Morse, of the United States, was regarded by some

persons as a prior discoverer of the electric telegraph. It was Wheatstone, as a scientific man, whose profound and successful researches paved the way for the practical application of the telegraph, and it is to Cook that we are indebted for the establishment of the telegraph system throughout Great Britain. But it was not until some time after I have mentioned that telegraphs came into general use. The definition of the word "Telegraph" is any apparatus for conveying intelligence beyond the limits of distance at which the human voice is audible. This word is now usually restricted to the electric telegraph. Consequently one cannot but suppose that the word in its former and not in its later signification gave rise to the term as applied to a coach, certainly not the modern apparatus with which we at the present day are so well acquainted.

When we consider that when the Queen came to the throne, railways were in their infancy, that the electric telegraph had not been invented, and that in many parts of England coaches were still running, one cannot fail to regard with astonishment the wonderful progress that has been made in such matters during the past fifty years, more especially when we consider that Englishmen of all shades of politics are of an eminently Conservative race; that everything new is regarded by them with suspicion; that no matter how intelligent an invention may be, a thousand objections are raised to its practical application. And not only is this the case, but the legislators of the land in framing the Patent Laws have hindered and obstructed all tendency to improvement, instead of offering encouragement and rendering assistance. In America all this is different; the State protects, but does not

heavily tax inventive genius; whilst the American people are ready to try anything until it is proved to be a failure.

The following letter appeared in *The Field* newspaper, June 16th, 1877, just ten years ago :

COACHING PICTURES.

SIR,—I have read with a considerable degree of interest an account of the exhibition of coaching pictures on view at the Gallery, 114, New Bond-street, which appeared in *The Field* of May 19th last; and also the letters in your subsequent editions with reference to the picture described in the catalogue as "Coaches Meeting on the Great North Road," as also on the scarlet coat question. On both I have consulted J. Hampton, of Huntingdon, who is referred to in Mr. Soame's letter of May 28th, and he states : "Forty-six years ago, I drove the Louth mail from London to Huntingdon. The Lynn, Hull, and Edinburgh coaches travelled the same road with me to Hoddesdon. The Hull left us there, and went on to the great north road, *via* Hertford and Stevenage. The Lynn left us at Royston, and branched off through Cambridge. The Edinburgh and myself continued on through Arrington and Caxton to Huntingdon, thence to Alconbury Hill, the junction with the great north road, where the three coaches met again. They then travelled on the north road to Norman Cross, where the Louth and Hull turned off to Peterborough, the Edinburgh going north, through Wansford and Stamford. Bill Wood drove the Lincoln, Harry Davis the Lynn, Jim Timour the Edinburgh, and Jack Hampton the Louth."

From Hampton's statement it would seem as if the third coach in the picture is the Edinburgh mail, and the place of meeting either Alconbury Hill or Norman Cross. I think, however, it is clear that the Lynn mail did not touch the north road at any point.

A propos of scarlet coats, Hampton says : "Mr. E. Sherman, whose coaches started from the 'Bull and Mouth,' gave all his coachmen scarlet coats; and any coachman who happened to be in town on the King's or Queen's birthday, as the case was, had one given him for the procession. Hampton had only one the whole time he drove the mail."

Hampton is, and has been for many years, "mine host" of the "Boro' Arms," Huntingdon, where he is always ready to give his reminiscences of the road in the good old coaching days, and, occasionally taking down a favourite whip from its rack, shows how fields were won; or when during term time some wild Cambridge freshman, tooling his four-in-hand, dashes over the roughly-paved

streets of the town, and awakening its echo with a shrill blast on his yard of tin, Hampton generally wends his way towards the "George" to have a look at the "tits," when he never fails to examine with a critical eye a coaching picture which hangs in the bar, entitled "Three Blind 'Uns and a Bolter." W. JACKSON.

The Causeway, Chippenham, Wilts, June 14.

There is one thing I notice about old coaching prints that represent coaches passing through London—the streets in these illustrations never appear crowded as they are now. There is a celebrated sketch of Alken's, entitled "Doing a Bit of City," which represents a few carriages being driven at a leisurely pace through an anything but crowded thoroughfare, and two horsemen riding as though it were nothing unusual to take a saddle horse into the City, and were even a pleasant and convenient mode of progression; in the same picture may be seen a tandem. Now I defy the best coachman in the world to drive a team of horses, either tandem or four-in-hand, with comfort in the City of London; and were any one to be seen doing so by his friends and acquaintances, he would never be allowed to forget such a foolish proceeding.

I came across a book the other day, of no particular interest although fairly well illustrated; the author's name is J. Hissey. In driving from London to the Land's End in a phaeton, he speaks of seeing in the entrance-hall of an old hotel at Alton in Hampshire, an old coaching-bill, of some hundred years ago, hanging up against the wall, giving the fares, times, and particulars of the journey to and from London. Being interested in this antique document, he carefully copied it; he afterwards mislaid his notes, and thereupon wrote to the landlord asking if he would be kind enough to send another copy, to which letter the landlord sent the following reply:

"I am very sorry to say I cannot comply with your request, for I thoughtlessly sold my old sign-board last year to a gentleman who was passing through here with a four-in-hand coach, and who took such a fancy to it, that he never left me alone till he got it."

It is evident that both Mr. Hissey and the landlord were in error as to the name of the thing upon which they set such value, since it was a coaching prospectus or time-table; nevertheless, it seems to have excited great attention, which is a fresh proof that all relating to the old coaching days is still regarded with interest. The same writer goes on to say :

"What a change for the worst in fifty years! Now all is rough, neglected, and deserted, which once was smoothness, life, and bustle; the easy ways have become hard for the nineteenth-century traveller. It is a shame that so many of our once excellent highways should have fallen into such a disgraceful state. It seems to me that the Government should keep the old main roads, or see, at least, that they are kept throughout in decent travelling order. In the days of the turnpikes, though the constant tolls added considerably to the expenses of a prolonged driving tour (I have paid as much as seven shillings in one day), and though the pulling up from time to time was a great annoyance, still one had the satisfaction of knowing that the roads were in fair order.

"In some things our progress has been backwards. In a certain district in Yorkshire, so terribly bad is (or was when we were there) the road between two small towns, that one of the inhabitants told me, had it been only passable, he should have much preferred driving between them, as then he was master of his

own time, but as such was not practicable, he was forced to go by rail. This is not as it should be, however beneficial to railway shareholders: people should not be compelled to take to the iron way."

Whilst on the subject of roads, I would mention that I came the other day across a work written by an American, describing a tour through England in the old coaching days, and this is what he says of them: "It is worth an American's while to go to England, merely to see the splendid roads and soft verdure of the fields. There is scarcely a turnpike road in the island, that is not as smooth as a floor; and in many places I have seen men repairing them, when it was impossible for me to discover a necessity for their doing so."

Mr. Hissey, in his "Driving Tour," says: "When leaving Charmouth in Dorsetshire, my horses had a deal of collar-work; in truth, our whole day's stage was either mounting or descending long and often steep hills; but this very fact gave us glorious and extended prospects ever and again as we gained the various summits. And then this had been an old coaching road, and so the gradients, though severe, were well engineered; but it had to get over the hills, and very trying it must have been for the 'cattle' when the mail was loaded and the going heavy.

"Terrible work in the winter, when the snow was thick on the ground. As the ostler informed us, on one particular hill, as many as eight horses were required to 'get through.' But the mails did not always get through.

"One bleak, stormy winter night, the snow falling hard and drifting as well, it is recorded that the mail

arrived late but safely at Charmouth, with but a single fare bound for Exeter. It was dark and freezing hard, the weather was most inclement, and the passenger declined to proceed further, so he alighted at the inn for the night. It was fortunate for him that he did so. But the mails had to go on. Out into the white world, out into the blinding snow, out into an Egyptian darkness of gigantic gloom, fronting the pitiless raging storm the coach proceeded; fighting its way, ploughing through the deep drifts, struggling slowly, it still crept onwards. The men had their duty to do, and they did it; but there was danger in the task. It was their business, they faced the risk without a chance of glory. Peaceful heroes they, but heroes still. Some miles on, at the top of a hill, the coach came to a standstill, and was soon snow-bound; it could neither proceed nor turn back. Leaving the guard in charge of the mails and horses, the driver essayed to return to the village for help. A vain endeavour: he lost his way and nearly his life. Benumbed, and half frozen in his contest with the bitter biting north-easter, not knowing where he was or whither he was wandering, eventually he observed a solitary light gleaming through the darkness, and towards this he clambered over hedges and fields. The welcome beacon led him to a farm-house. The farmer, duly aroused and informed of the state of affairs, got some of his labourers together, and went in search of the snow-bound coach. The bewildered driver could give but little information as to its whereabouts, and the task of discovery was no easy one. The party shouted again and again, but their voices were almost drowned by the howling winds, and deadened by the falling snow. They stopped to

listen from time to time, but no answer came back to them ; or if it did, it was lost in the louder voices of the storm. It was not till early dawn that the half-buried coach was discovered, wreathed round with deep snow-drifts. At once a loud cry was raised as the relieving party hurried forward, but there was no response. The poor guard and helpless horses were frozen to death.

“ So the good old days of coach travel had their dark side, a very dark one sometimes. Exhilarating as driving across country was in fine weather, behind a fast-galloping team, with the many varying incidents of the road, and the coachman’s ready jokes and racy anecdotes to enliven the journey, it must be remembered it was not always summer or fair weather.

“ Such legends and stories of the old coaching days still abound, and may be picked up by the traveller by road at the many ancient hostelries which yet remain dotted over our forsaken highways. These have been handed down from sire to son, losing possibly in accuracy by each succession of tellers. The days must come when these traditions will altogether cease, or become so fabled and blended with romance as to be of little value.”

The same writer says : “ Some distance from Charmouth, at the highest point of the road, we entered a tunnel cut through the crest of the hill. This was the first we had passed through during our lengthened drives about Great Britain ; indeed, we had till then no idea such a thing existed on the ordinary roads ; we thought they were confined to the railways. Plenty of cuttings there are of course (but not tunnels), some both extensive and deep, such as the long one excavated through the chalk downs just the other side

of Dunstable on the old Holyhead road going north. A vast undertaking in those days, which would be considered a great work even now, and one that tells plainly of the skill of that famous pre-railway engineer, Telford."

As this writer remarks, there are very few English high-roads passing through tunnels, the configuration of the land over which they pass does not need such feats of engineering skill. It is only such mountain roads as I have mentioned in my first chapter that require it.

In the days when the coaches ran, naturally there were many road-books and maps published, amongst which was Thomas Kitchins' "Post-chaise Companion," published in 1767. This was essentially a road-book and a guide to distance, inns, and objects of interest on the way.* In 1811 was published the fifteenth edition of a very celebrated road-book by Lieut-Col. Paterson, Assistant Quartermaster-General to His Majesty's Forces. This book was published in the latter part of the reign of George III. The title-page is as follows :

* There was Cary's "Traveller's Companion," published at 86, St. James's Street, with excellent maps ; and also Mogg's "Pocket Itinerary."

A NEW AND ACCURATE DESCRIPTION
OF ALL THE
DIRECT AND PRINCIPAL CROSS ROADS
IN
ENGLAND AND WALES,
AND PART OF THE
ROADS OF SCOTLAND,

WITH A VARIETY OF NEW ADMEASUREMENTS, A GENERAL MAP
ADAPTED OF THE WORK.

NEW MAPS, viz. : of the Southern Coast with the country adjacent ;
of the Isle of Thanet ; of the Isle of Wight ; and of the parts
of Cumberland, Westmoreland, and Lancashire, comprehending
the Lakes.

An Account of Noblemen's and Gentlemen's Seats, and other
remarkable objects.

A General Index of the Roads to the different Towns, denoting the
Counties in which they are situated, their Market days, and the
Inns which supply Post-horses.

An Index to the Country Seats, and places described.

A Table of the Heights of Mountains and other eminences, from
the Grand Trigonometrical Survey of the Kingdom, under the
direction of Lieut.-Colonel Mudge.

Correct Routes of all the Mail-coaches, and an Alphabetical Table
of all the Principal Towns, containing the Rates of Postage, the
Times of the arrival and return of the Mails, the Population, etc.

The whole greatly augmented and improved by FRANCIS FREELING,
ESQ., Secretary to the G. P. O., and of the several Surveyors of
the Provincial Districts under the Authority of the POSTMASTER
GENERAL.

BY LIEUTENANT-COLONEL PATERSON,

ASSISTANT QUARTER-MASTER GENERAL OF HIS MAJESTY'S FORCES.

THE FIFTEENTH EDITION.

LONDON :

PRINTED FOR THE PROPRIETOR AND SOLD BY MESSRS. LONGMAN, HURST,
REES, ORME & BROWN, PATERNOSTER ROW.

1811.

We see no such comprehensive title-pages nowadays; the whole contents of the book appear on the title-page, but this does not occur in later editions. This road-book was published by Messrs. Longman & Co., in 1811, seventy-six years ago. The house of Longman, which brought it out, still exist, and are well-known publishers.

The names of the places and various roads are arranged in a column on each page in this book, on the left-hand side, and the distances occupy two more columns; there being a space for marginal notes, this space is occupied generally with a description of scenery, objects of interest, the names of gentlemen's country houses, inns, etc.

The measurements, which are taken in miles, halves and quarters of miles, are arranged in two columns, the first giving the distance from one city, town, or village to the next, the second, the number of miles from the commencement of the road; and this plan is adhered to throughout the book, whether the measurement be from London, as in all the direct roads, or from some noted city or town, as in the cross-roads. Thus, from the "King's Head" at Lower Mitcham, to the "Cock Inn" at Sutton, is three miles, and this inn is eleven miles and a quarter from London, where the measurement begins; the Obelisk on Banstead Downs is a mile and three-quarters from the "Cock Inn" at Sutton, and thirteen miles from London.

It is amusing to notice in this edition of Paterson's work the following paragraph, which is introduced into the preface: "It may be necessary to remark, that the roads which are pointed out by the initials R. and L., as branching to the right and left, are in

general turnpike roads, but the distinction is not expressed; and, as travellers are frequently deceived by the natural expectation that turnpikes should be good roads, it is therefore recommended to make previous inquiry into the state of them, as many of the cross turnpike roads are, in winter time, and often after wet weather, rendered almost impassable."

This acquaints us with the fact that cross-roads in the care of turnpike trustees were not very good in those days. In this book the great roads were measured as follows :

The Kent roads were measured from the Surrey side of London Bridge down the Old Kent Road.

The Portsmouth road and those branching from it were measured from the Stone's End, in the Borough.

The Croydon, Ryegate (Reigate), Epsom, and Brighthelmstone (Brighton) are measured from the Surrey side of Westminster Bridge, and from the "Standard" in Cornhill. The distance from Cornhill was exactly one mile more than from Westminster Bridge.

The Winchester, Southampton, Dorsetshire, Devonshire, Cornwall, Wiltshire, Somersetshire, and all the roads in the south-west of the kingdom were measured from Hyde Park Corner through Brentford.

The Uxbridge, Edgware, Birmingham, Shrewsbury, and most of the roads in the western part of the kingdom were chiefly measured from Tyburn turnpike at the top of Oxford Street.

The Highgate and Hampstead roads were measured from Holborn Bars, near Gray's Inn Lane, and from the bottom of Oxford Street, where St. Giles's pound formerly stood. A stone in the

front of one of the houses in St. Giles's, facing Oxford Street, with an inscription, points out the spot.

The Barnet road and all the roads in the north and north-west of the kingdom were measured from the place where Hicks's Hall formerly stood ; viz. at the end of St. John's Lane, St. John's Street, West Smithfield. A stone in the front of one of the houses has an inscription pointing out the spot.

The Ware and Huntingdon roads, with the branches therefrom, were measured from Shoreditch Church ; but the milestones were numbered from this standard no further northward than Alconbury Hill, where these roads join the great north road, as measured from Hicks's Hall.

The Essex roads were measured from White-chapel Church ; and time can have had no effect on these measurements. By means of these road-books, any town or village, however small, could be found, and the distance from London, or from where the road started, ascertained, first by tracing the main road, and then by branching off to the cross-road.

An eighteenth edition of Paterson's road-book appeared in 1829 ; this edition was edited by Edward Mogg, and was very much enlarged ; it was dedicated to King George IV. In this edition there is a very curious table giving the rates of postage and the times of arrival and departure of the mails. As it would occupy too much space to give this list in full, I have only mentioned towns of importance ; this was, of course, before the days of penny postage. In this list may also be seen the time at which the mail-coaches arrived and returned to London. This list was copied from the returns made to Parliament in 1831, and was corrected by competent authorities.

PLACES.	POSTAGE.	MAIL COACHES.		DISTANCE FROM LONDON.	POPULATION 1831.	POPULATION 1861
		ARRIVE.	DEPART.			
		H. M.	H. M.			
Andover .	8	4. 0 f	10. 0 a	63	4,748	5,221
Aylesbury .	7	1. 0 f	2. 0 f	38	4,907	6,168
Bath .	9	8.20 f	6. 0 a	106	38,063	52,528
Bedford .	8	2. 0 f	4. 0 a	53	6,959	13,413
Birmingham .	9	8.45 f	5. 0 a	109	146,986	296,076
Brighton .	8	4. 0 f	10. 0 a		40,634	77,693
Bristol .	10	10.10 f	4. 0 a	114	59,074	154,093
Buckingham .	8	7. 0 f	6.30 a	55	3,610	3,849
Colchester .	8	12.30 f	12.30 f	51	16,167	23,809
Derby .	10	11.10 f	3.25 a	126	23,607	44,091
Davenport .	11	6. 0 f	8.30 a	218	75,534	50,440
Doncaster .	10	3. 3 a	10.35 f	162	10,801	16,406
Dorchester .	10	11. 0 f	3. 0 a	119	3,033	6,823
Dover .	8	6. 0 f	8. 0 a	71	11,924	25,325
Durham .	12	4.15 f	3.47 a	258	10,125	14,088
Eastbourne .	8	8. 0 f	5. 0 a	61	2,726	5,795
Epsom .	5	10.15 a	4.45 f	14	3,231	4,890
Exeter .	11	5.45 a	8. 0 f	164	28,201	33,738
Falmouth .	12	10. 0 f	2. 0 a	216	4,761	5,709
Folkestone .	9	7.20 f	6.30 a	70	3,638	8,507
Gloucester .	9	10. 0 f	4.30 a	104	11,933	16,512
Gravesend .	6	10.45 a	3.15 f	22	5,097	18,782
Guildford .	7	midnt.	2. 0 f	29	3,813	8,020
Harrowgate .	11			211	2,812	4,737
Hastings .	8	6.30 f	8. 0 a	64	10,097	22,837
Holyhead .	12	4. 0 f	7.40	267	4,282	6,193
Hounslow .	4	9.35 f	8. 0 a	10		
Hull .	12	5. 0 f	5. 0 a	174	32,958	97,661
Ipswich .	8	5. 0 f	10. 0 a	69	20,454	37,950
Leamington .	9			89	6,209	17,958
Leicester .	9	7. 0 f	7. 0 a	96	39,306	68,056
Lincoln .	10	1.13 a	10.30 f	132	11,892	20,999
Liverpool .	11	7.30 a	10.30 a	206	165,176	443,938
Lowestoft .	9	10.30 f	4. 0 a	114	4,238	10,603
Manchester .	11	6. 0 a	7.35 f	182	142,026	440,760
Melton .	9	9. 0 f	4. 0 a	105	3,356	4,047
Newcastle .	12	6. 0 f	2. 0 a	274	42,760	109,108
Newmarket .	8	3.45 f	10.45 a	61	2,840	4,069
Northampton	8	4. 0 f	10. 0 a	66	15,351	32,813
Norwich .	9	10. 0 f	4.30 a	108	61,110	74,891
Nottingham .	10	12. 5 a	2.30 a	124	50,680	74,693
Oakham .	9	8. 0 f	5.30 a	95	2,440	2,948

PLACES.	POSTAGE.	MAIL COACHES.		DISTANCE FROM LONDON.	POPULA- TION 1831.	POPULA- TION 1861.
		ARRIVE.	DEPART.			
		H. M.	H. M.			
Oxford . . .	9	3. 0 f	11.30 f	54	20,434	27,560
Pembroke . .	12	8.30 f	5. 0 a	264	6,511	15,071
Plymouth . .	11	6. 0 f	5.30 a	216	75,534	62,599
Portsmouth .	8	6.10 f	7.30 a	72	8,083	94,799
Preston . . .	11	11. 0 a	6. 0 a	217	33,112	82,985
Ramsgate . .	8	7. 0 f	6.30 a	71	7,985	11,865
Reading . . .	7	1.30 f	2. 0 f	38	15,595	25,045
Rochester . .	6	12. 0 f	1.40 f	29	9,891	16,862
Romsey . . .	8	9. 0 f	6.30 a	73	5,432	2,116
Rugby	9	8. 0 f	5.30 a	83	2,507	7,818
St. Albans . .	6	10.30 a	4. 0 f	20	4,772	7,675
Salisbury . .	9	6. 0 f	8. 0 a	81	9,876	12,278
Scarborough .	12	6.30 f	1.30 a	217	8,369	18,377
Shrewsbury . .	10	2.30 a	10.30 f	153	21,227	22,163
Southampton .	9	6.25 f	8.30 a	74	19,324	46,960
Tunbridge Wells	7	12.30 f	1. 0 f	36		
Warwick . . .	9	7.42 f	6.57 a	90	9,109	10,570
Wells.	10	11.45 f	1.55 a	124	6,649	4,684
Weymouth . .	10	12. 0 f	2. 0 a	128	2,529	11,383
Winchester. .	8	4. 0 f	10.45 a	62	9,212	14,766
Windsor . . .	6	6.40 f	8.30 a	22	5,513	9,520

These road-books are almost as useful now as they were in the coaching days; it is interesting to notice the increase in the population of the various towns and villages, and the landmarks and objects of interest which are mentioned are frequently the same as those with which we are now familiar. The distance can never alter, consequently these guide-books are as perfect indications to distance at the present day as they were when published, and I strongly recommend any one intending to go on a driving tour to get possession of one if he can contrive to do so. The other day, in a second-hand bookseller's shop at Hastings, I came across a county atlas and road-book published in the reign of

James I. and dedicated to that monarch. I did not care to purchase such a book myself, although the price was very moderate; but I have no doubt that as a curiosity the book was of great value, and I recommended the bookseller not to let it go unless he obtained a good price for it, as it is not often one meets with a county atlas published as early as the year 1605. It was a large folio volume bound in calf, with a very elaborate title-page.

Cary's "*Traveller's Companion*," of which I have spoken elsewhere, was published by Cary, the engraver, at 86, St. James's Street, and bears the date of 1828. It was bound in calf. Mogg's "*Itinerary*" is a small pocket volume, bound in green morocco, and published at the Office of Roads, 14, Great Russell Street, Covent Garden.

The last edition of "*Paterson's Roads*" is simply perfect; it is wonderfully well bound in calf, the letter-press is most excellent and well arranged, and the maps are triumphs of art; in fact, Mr. Stanford, the well-known map-seller of Charing Cross, when he sold me this last copy, called my attention to the beautiful engraving of these maps, saying that there was nothing produced at the present day to equal them.

I believe that copies of this book now are very rare and consequently difficult to obtain. Some road-books have been written of late years for the use of bicyclists and tricyclists, but they cannot bear any comparison to the celebrated old standard road-book of the coaching days. I will speak of recent road-books and maps at another time. Paterson's road-book also contained a table of the charges for a pair of post-horses for any stage from five miles to twenty, at any rates from twelve to eighteenpence per mile.

A pair of post-horses for five miles cost five shillings, and at one and sixpence a mile, seven and sixpence. At twelvepence a mile for twenty miles they of course cost a sovereign, which appears to have been remarkably cheap; but horses in those days did not cost what they do now. Lord William Lennox, in his very interesting book on coaching, says that the average price of horses for the fast coaches was about £23. Fancy teams and those working the first stage out of London were rated considerably higher; taking a hundred miles of ground well-horsed, the above was about the value. "In these days," he very truly says, "it would be nearly if not quite double," as mentioned elsewhere. The average period of each horse's service did not exceed four years. By this is meant that at the expiration of four years the horses were worn out. If the horses lasted no longer than this, it was evident that the demand for horses must have been very great, and where there is a very great demand there should have been a fair supply. "At Hounslow, the first stage out of London on the great road leading to the West of England, there used to stand solely for posting and coaching, 2500 horses." Lord William Lennox, in speaking of the desertion of the roads and the introduction of the locomotive, says that "Each of these horses must have occasioned an outlay of two pounds per week for keep, duty, shoeing, ostlers, harness, and clothing, not to mention the veterinary surgeon, so that there was a sum of five thousand pounds circulated every week in this one town, besides money that was spent by travellers at the different inns." But I think this estimate was rather high. He goes on to say that the state of things on the

first stage on the western road will serve as an example for the remaining distance.

In the last days of coaching there was scarcely a town in England through which some sort of stage-coach did not pass. Just at the last the manner in which the coach business was conducted was simply perfect; very long distances were done in a single day, such as between London and Manchester, Exeter and Shrewsbury. The coaches used to run to Brighton at the rate of twelve miles an hour. One of the Stamford stage-coaches, that ran daily to London in 1807, accomplished the journey, ninety-nine miles, in nine hours and four minutes, including time for refreshments; the coach maintained a rate of twelve miles an hour. Fast coaches had a horse to every mile of road over which they ran.

Lord William Lennox, to whose book I venture to make some reference, in speaking of coaching, appears to do so from personal knowledge and experience; he not only travelled a great deal by coach in his younger days, but frequently, when a youngster, drove public coaches himself. When his book was published, he was seventy-three years of age. He says that "a young man alive at the present day, hardly knows to what improvement of human life he has been introduced; gas," he says, "in my young days was unknown, the streets of London were in semi-darkness. It took me nine hours sailing from Dover to Calais before the invention of steam, and nine hours to go from Taunton to Bath before the invention of railroads."

In point of comfort there can be no comparison between railway travelling and coaching, that is to say in rough wintry weather, or even in wet summer

weather ; the discomfort of being packed like sardines in a box on the top of a coach, with somebody's wet umbrella dripping down your neck, and a pool of water collecting at your feet, is not pleasant. I experienced this kind of thing in the Lake districts only three years ago, and this, together with other things occurring on the journey, gave me a thorough insight into travelling on a coach in inclement weather.

In the old coaching days, passengers occasionally suffered very severely. On one occasion when the Bath coach arrived at Chippenham, two outside passengers were found to have perished with the cold, and the third, a soldier, although still alive, died the following morning,

However charming a drive might have been in fine pleasant weather behind four well-bred horses, it must have been very unpleasant when forced to undertake a long journey on a pitch-dark tempestuous night in the depth of winter.

It is always a surprising thing to me, that no one, in those days, should have ever thought of building a vehicle to run on the public road like the present private four-horse omnibus ; it would have been a very great improvement upon the dark interior of a four-horse coach, although perhaps not so stylish in appearance. On a lovely spring or summer's day, with the road lightly watered by a passing shower, it is more pleasant to travel short distances by road than rail ; but, taking it all round, the rail is immensely preferable.

Those who regret the days of coaches must be those who benefited by their running, or young men who have never known the horrors of a winter coach journey ; besides which there were numerous accidents

on the road, owing to intoxicated drivers, dense fogs, heavy snow-storms, floods and the breaking of harness; and sometimes owing to the skid not locking the wheel on descending a hill, their poles broke, reins sometimes parted, and numerous other accidents occurred.

Frequently coachmen would race against one another, as was the case in 1820, when two coachmen named Butler and Perdy were charged with the wilful murder of William Hart, who was thrown off the Holyhead mail of which Perdy was the driver, and which was upset by the Chester mail of which Butler was the driver. Lord W. Lennox says that "The grand jury having thrown out the bill for the capital offence, they were tried on a charge of manslaughter. Two witnesses who were suffering severely from the accident made the following deposition :

"Mr. Archer, a respectable bootmaker of Cheapside, London, stated that he sat on the box with the prisoner Perdy. When the coach arrived at that part of the road beyond Highgate, where a junction is formed between the Archway Road and the old Highgate Road, the Chester mail came up. Both coachmen began to whip their horses and put them into a gallop, and drove abreast of each other at a furious rate for a considerable distance, when the driver of the Chester mail slackened the pace of his horses and seemed conscious of the impropriety of his conduct ; but when the coaches approached towards St. Albans, and had arrived at the hill about a mile from the town, the prisoner Perdy put his horses into a furious gallop down the hill. His example was followed by the other prisoner, who endeavoured to overtake him, and a most terrific race ensued between the two carriages, the velocity

of both increasing by their own accelerated descent down an abrupt hill.

"The road was wide enough for three carriages to pass each other ; but the prisoner Butler perceiving that Perdy was keeping ahead of him, pushed his horses on, and waving his hat and cheering, suddenly turned his leaders in front of the leaders of the Holyhead mail, which, in consequence of being jammed in between the bank of the road and the other vehicle, was immediately upset. The consequences were frightful. The deceased was killed on the spot, the witness had a leg and an arm shattered most dreadfully, and a gentleman's servant, named Fenner, was taken up almost lifeless. Thomas Fenner confirmed the last witness ; he stated that both the prisoners were flogging their horses at a most furious rate down the hill, and he was convinced that the accident might have been avoided with common care, notwithstanding the velocity with which the horses were driven, as there was quite room enough for the Chester mail to have passed the Holyhead.

"Mr. Baron Gurney summed up the case for the jury in an eloquent and impressive manner. The jury found the prisoners 'Guilty.'

"The learned judge, in passing sentence, commented on the conduct of the prisoners in terms of strong animadversion. His lordship laid it down distinctly, as a proposition not to be disputed, that it was unlawful for the driver to put his horses into a gallop, and that he was answerable for all the consequences of an infringement of this law." *

* I believe this law was frequently evaded by having one fast-trotting wheel-horse, who trotted whilst the other three horses were galloping, the law making it punishable only when all four horses galloped.

The same writer describes a serious accident which happened in April, 1826, to the Dorking coach. "This coach," he says, "left the 'Elephant and Castle' at nine o'clock, full inside and out, and arrived safe at Ewell, where the driver and proprietor, Joseph Walker, alighted for the purpose of getting a parcel from the back part of the coach and gave the reins to a boy who sat on the box. While he was delivering the parcel to a person who stood near the after wheel of the coach, the boy cracked the whip, and the horses set off at full speed. Several attempts were made to stop them, but in vain; they passed Ewell church, and tore away about twelve yards of strong paling, when, the wheels mounting a small eminence, the coach was overturned, and the whole of the passengers were thrown from the roof. Some of them were in a state of insensibility, showing no symptoms of life. A woman who was thrown upon some spikes, which entered her breast and neck, was dreadfully mutilated, none of her features being distinguishable; she lingered until the following day, when she expired in the greatest agony."

The same writer in speaking of the Oxford coach says: "Never shall I forget an adventure that happened to me on the box of the far-famed 'Tantivy.' We had just entered the 'University' from Woodstock, when suddenly the horses started off at an awful pace. What made matters worse was that we saw at a distance some men employed in removing a large tree that had fallen during the storm of the previous night across the road, near St. John's College. The coachman shook his head, looking very nervous, while the guard, a most powerful man, stood up to be prepared for any emergency. On we went, the coachman

trying in vain to check the galloping steeds, and we had got within a few yards of the critical spot, when the guard, crawling over the roof, managed somehow or other to get on the footboard, when, with a spring, he threw himself on the back of the near wheeler, and with a giant's grasp checked the horses at the very moment the leaders were about to charge the tree. Down they came, but the guard never yielded an inch, and with the assistance of the country people nearest at hand, the leaders regained their legs without the slightest damage to man, horse, coach, or harness. A subscription for our gallant preserver was got up on the spot."

Many other anecdotes this writer tells of the road ; of all the books which have been written on the subject of coaching there is none more interesting. He remarks how in October, 1816, English stage-coaches were introduced into France, they started from Dieppe and ran between St. Denis and Paris ; but the undertaking was not successful, the Parisians preferring their lumbering diligences to the well-appointed English coach.

Travelling by the mail rather than by the stage-coach had one advantage ; all other coaches and every vehicle encountered on the road had to make way for the mail, it changed horses every eight miles, and time had to be kept with extreme punctuality. It was a royal way of travelling, in every sense of the word, since it carried the royal mails ; there was no vast collection of luggage on the roof, nor a crowd of passengers all anxious to secure the best places.

Captain Haworth has written a book called " Road Scrapings," having to do with coaches and coaching ; the illustrations are evidently home-made, which makes

one regret that he did not employ a professional artist.

Here ends my chapter on mail and stage-coaches, a matter in which all who are fond of driving must feel some interest, and yet no one, except he be fully qualified for the interior of a lunatic asylum, will regret the day when George Stephenson brought the invention of the locomotive to a successful issue, or will nourish ill-feeling against the men who, since his death, have striven by the exercise of supreme intelligence and remarkable inventive genius to improve the machine, to the invention of which the inhabitants of this world owe their daily increasing civilisation, and the free and greatly accelerated expansion of international intercourse.

CHAPTER III.

IRISH MAIL AND STAGE-CARS.

Irish troubles—A clever novelist—Larry Flood—A sprig of shillelagh—As safe as in church—These roads before they were made—A rustic cicerone—A wild Irishman—Irish impudence—Bianconi—Leaving home to seek a fortune—A spirit of mischief—His first car—Car-drivers—Electioneering—The Bians—Irish fisheries—Immunity from violence—Bianconi's popularity—Mayor of Clonmel.

BEFORE quitting the subject of road travelling by public conveyances, I feel compelled to mention Irish jaunting-cars. These vehicles are not to be found in common use in any other part of the civilised world. Those persons who have not visited Ireland may have been made familiar with them by seeing sketches of them in *Punch*. John Leech not only portrayed the Irish car, its driver, and the horse which drew it, but gave us the jokes of the Irish car-driver, and so furnished us with excellent examples of their wit, good-humour, and readiness of repartee.

The Irish car is inseparably connected in our minds with Ireland and the Irish; there is an eccentricity about it that appeals to our sense of the ludicrous. Both to the theoretical and practical coach-builder it is possessed of no good quality when balanced on two wheels, as the balance is rarely, if ever, true. In the dog-cart the weight is distributed almost over the axle, but this is not the case with Irish cars.

Sometimes some one, enthusiastic about all that is Irish, exports one of these vehicles, and it is seen



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BIANCONI'S CARS, 1886
Arriving at the end of a stage.

standing in a coach-house side by side with sober and precise English carriages, like a clown or a pantaloone amidst a gathering of Church dignitaries in full canonicals; or wending its way along our quiet English country lanes.

Passenger cars took the place of coaches in Ireland some sixty years ago. There has always been trouble in Ireland, but in those days there was not so much as in recent years. A writer has remarked that "in those days landowners lived in peace upon their properties, the peasantry were glad to see them and have them living amongst them, every look was then a smile, and, although the shillelagh was in frequent use, a rap over the head at a convivial meeting with that weapon was often regarded as a token of friendship. No Irish fair would have been perfect without a flare-up between the boys, and if a few heads were bruised it was looked upon as a very ordinary occurrence."

When the coaches were in existence they were very roughly turned out, but the roads were excellent, and so they have ever since remained; as for the coaches, if they were rather rough, they went at a great pace, as the horses were nearly always good.

Nevertheless, Irishmen do not consider it necessary to break a horse so completely as we do. Consequently to the coaches, and even later, to the cars, some very queer customers were harnessed; often they would be led out of a field, a twitch being put on their nose, and one of their fore-legs being held up, they were initiated into the mysteries of harness, never having before looked into a collar, or had a bit in their mouths. Very frequently they would start the coach or car with one such animal

amongst the team, probably as a wheel-horse, and a crowd of ragged young urchins would collect and follow the vehicle barefooted for at least half-a-mile, screaming and yelling to their hearts' content.

The common Irish jaunting-car is a kind of one-horse chaise, frequently without springs, in which people sit back to back, and with their faces looking sideways.

Miss Croker, in her clever novel, "*A Bird of Passage*," gives an amusing account of a young English lady's arrival in Ireland, and her first introduction to Irish cars as follows :

"After four hours' leisurely travelling on the rail from Dublin, she was deposited at a rough shed placarded *Bansha*. Bag in hand she stepped down on the platform and looked about her. She was, apparently, the only passenger in that out-of-the-way part of the world ; save a few countrymen who were lounging about, there was the invariable policeman and one solitary porter. She was the cynosure of every eye except the porter's, and he was busily engaged in spelling out the name and address on her trunk.

"'You'll be for the Castle, miss,' he at length remarked, rising up from the inspection of her luggage.

"'No ; for *Crowmore*, Mr. *Sheridan's* place,' she replied, walking out through the station entrance in the fond hope of finding some conveyance waiting for her, but all that met her sight were a little group of countrymen, who were gossiping to a rough-rider on a heavy-looking brown colt.

"'Shure, Mr. *Sheridan's* and the Castle is all wan,' continued the porter.

“ ‘How far then is it to Crowmore?’ she asked.

“ ‘Well, it’s a matter of in or about six mile.’

“ ‘And how am I to get there?’

“ ‘Faix, I don’t rightly know, unless Larry Flood gives you a lift on the mail.’

“ ‘And when do you think Larry Flood will be here?’ inquired the young stranger.

“ ‘Troth, an’ it would be hard to say! it entirely depends on the humour he’s in. He calls for the letters,’ pointing to a bag in the doorway, ‘just as he takes the notion; sometimes he is here at five o’clock, and betimes I’ve known him call at one in the morning.’

“ A sudden interruption made him turn his head, and he added, with a triumphant slap of his corduroy leg:

“ ‘Begorra, you are in luck, miss, for here he is now!’

“ As he spoke, a red outside car, drawn by a wild-looking chestnut, wearing a white canvas collar, and little or no harness, came tearing into the station amidst a cloud of dust. The driver was a wiry little man, with twinkling eyes that looked as if they were never closed, a protruding under-lip, and an extravagantly wide mouth. He was dressed in a good suit of dark tweed, and wore a green tie and a white caubeen.

“ ‘What’s this ye have with ye, the day, Larry?’ demanded one of the idlers, as he narrowly examined the animal between the shafts. ‘May I never,’ he added, recoiling a step backwards and speaking in an awe-struck tone, ‘if it isn’t Finnigan’s mare!’

“ ‘The divil a less!’ rejoined Larry complacently. ‘Finnigan could get no good of her, and the old

brown was nearly bet up. I'll go bail she'll travel for me,' he added, getting off the car as he spoke, and giving the collar a hitch. But this proud boast was received in ominous silence, and all eyes were now riveted on Mr. Flood's recent purchase—a white-legged, malicious-looking thorough-bred—that was seemingly not unknown to fame.

“‘Well,’ said a man in a blue-tail coat, after a significantly long pause, ‘it’s not that she won’t travel for ye, there’s no fear of that. I hope you may get some good of her, for she’s a great mare entirely; but she takes a power of humouring.’

“‘Shure, she knocked Finnigan’s new spring car to smithereens, ere last week,’ put in the rider of the coarse-looking brown colt; ‘not a bit of it was together but the wheels, and she left Finnigan himself for dead on the road,’ he added with a kind of scornful snort.

“‘You got her chape, I’ll engage, Larry, me darlin’,” remarked another of the idlers.

“‘Faix, and I paid enough for her,’ returned her owner stoutly. ‘It isn’t every man that would sit over her! She does be a bit unaisy in herself betimes’ (a delicate allusion to her well-known habits of kicking and bolting); ‘howdsomever, she’s a grand goer, and I bought her designedly on purpose for the post. ’Tis she can knock fire out of the road.’

“‘Oh! them sprigs of shillelagh can all do that,’ acquiesced a bystander, who had hitherto observed a benevolent neutrality; ‘but they does be dangerous bastes.’

“Larry thereupon turned to the porter with an off-hand air, and said:

“‘Anything for me, Pat?’

“‘Nothing at all, barrin’ the mails and this young lady. I’m after telling her you’ll lave her at the gate; she’s going to the Castle, only——’ approaching nearer, and whispering behind his hand with a significant glance at Finnigan’s mare.

“‘Oh, the sorra a fear!’ rejoined Larry loudly, and then addressing the young lady, he said: ‘Up ye git, miss, and I’ll rowl ye there as safe as if ye were in a sate in church.’

“It was all very well to say ‘Up ye git;’ but, in the first place, there was no step to the car, and, in the second, it is by no means an easy feat to climb on any vehicle when in motion, and Larry’s rampant investment kept giving sudden bounds and playful little prancings, that showed her impatience to be once more on the road. However, by dint of being held forcibly down by the united strength of two men, she consented to give the lady passenger an opportunity of scrambling up on the jarvey; and Larry having produced a horse-rug (with a strong perfume of the stable), wrapped it carefully about her knees, then, mounting on the other side of the vehicle himself, he laid hold of the reins, and, with a yell to his friends to ‘Give her her head,’ they were off as if starting for a flat-race, accompanied by a shout of ‘Mind yourself, miss,’ from the friendly porter, and ‘Safe home, Larry,’ from the little knot of spectators who were gathered round the station door.

“At first, all the ‘So-hoing,’ and ‘Easy now, my lass,’ might just as well have been addressed to the hard flint road along which they were rattling. The mare kept up a fast canter for the best part of a mile, and the girl’s whole energies were devoted

to clinging on with both hands, as the light post-car swung from side to side with alarming velocity.

“‘You need not be the laste taste unaisy, she’s only a bit fresh in herself,’ said Larry soothingly; ‘and, after a while, when she settles down, you’ll be delighted with the way she takes hold of the road.’

“A very stiff hill moderated the pace, and Finnigan’s mare subsided perforce into a slashing trot, and ‘took hold of the road’ as if she were in a passion with it, and would like to hammer it to pieces with her hoofs.

“Now and then they passed a big empty place with shuttered windows, now a prosperous-looking farm with ricks and slated outbuildings, and now a roadside mud-cabin; Finnigan’s mare dashing madly through poultry, pigs, goats, and such sleeping creatures as might be imprudently taking forty winks in the middle of the little-used highway—which highway, with its overhanging ash-trees, tangled hedges, and wide grass borders, was the prettiest and greenest that Larry’s passenger had ever beheld. This much she imparted to him; and he, being ripe for conversation, immediately launched forth with the following extraordinary announcement:

“‘Och, but if ye had seen these roads before they were made, ’tis then ye might be talkin’! There was no ways of getting about in ould times, no play for a free-going one like this!’ nodding exultingly at the chestnut, who was flying down hill at a pace that made the post-car literally bound off the ground. ‘She’s going illegant now; these chestnuts does mostly be a bit “hot,” but where would ye see a better traveller on all the roads of the worruld?’

“‘She is not quite trained, is she?’

“‘Well, not to say altogether,’ he admitted reluctantly; ‘she’s had the harness on her about a dozen times, and she never did no harm—beyond the day she ran away at Dan Clancy’s funeral, and broke up a couple of cars; and ’twas Finnigan himself was in fault, he’d had a drop. Shure, she’s going now like a lady’s pony! Maybe you’d like to take the reins in your hands yourself, miss, and just feel her mouth?’

“But the girl, casting her eyes over the long, raking animal in front of her, and observing her starting eyes, quivering ears, and tightly tucked-in tail, had no difficulty in resisting Larry’s alluring offer. Little did she know the vast honour she was rejecting. Larry (like most Irishmen) was not insensible to a pretty face, and rating this young lady’s courage beyond its deserts—owing to her equanimity during their recent gallop, and the tenacity of her hold upon the jaunting-car—paid her the greatest compliment in his power when he offered her the office of jehu. Then she, having politely but firmly declined the reins, breathed an inward wish that the animal who had behaved so mischievously at Dan Clancy’s funeral, would continue her present sober frame of mind until she was deposited at the gates of Crowmore.

“And now Larry began to play the cicerone, and commenced to point out various objects of interest, with the end of his whip and the zest of a native.

“‘That’s Nancy’s Cover,’ he said, indicating a patch of gorse. ‘There does be a brace of foxes in it every season; that ditch beyond, running along in company with the cover as far as your eye will

carry you, goes by the name of "Gilbert's Gripe," because it was there—a nephew of Mr. Redmond's I think he was, in the horse soldiers—pounded every other mother's son in the field! Be jabers, I never saw such a lep! and the horse—the very same breed as this mare here—he never laid an iron to it!

"'By the powers of Moll Kelly, but I see the Corelish post-car, there ahead of us in the straight bit of road. Do you notice him, miss? The wreenchie little speck. I do mostly race him to the Cross of Cara Chapel, where our roads part, and I'm thinking I've the legs of him this time! Altho' he has the old piebald and a big start we'll just slip down by the short cut through the bog, and nail him neatly at the corner!'

"At first this announcement was Greek to his fare; but she began to comprehend what he meant, as he turned sharply into a by-way, or boreen, and started his only too willing steed at a brisk canter!

"'There's Cara Chapel,' he said, indicating a slated building on the edge of a vast expanse of bog. 'You'll see how illegantly we will disappoint him; he is on the upper road, and that puts a good mile on him. It will be worth your while to watch his face, as we give him the go-by and finds we have bested him after all! Do you get the smell of them hawthorns, miss? They are coming out beautiful' (as they careered along a narrow, grassy boreen, between a forest of may-bushes, white with flower). 'And now, here's the bog,' he added excitedly, as the boreen suddenly turned into a cart-track, running like a causeway through a wide extent of peat and heath, that lay far beneath on either side, without the smallest fence or protection of any kind. It was an exceedingly

awkward, dangerous-looking place, and they were entirely at the mercy of Finnigan's mare, who rattled joyously along, pricking her dainty ears to and fro, as if she was on the *qui vive* for the smallest excuse to shy and bolt—and the pretext was not wanting! A jackass on the edge of the bog below, suddenly lifted up his voice in song and brayed. It was so near, and so piercingly shrill that even the girl herself was startled; how much more the sensitive creature between the shafts, who stopped for one second, thrust her head well down between her fore-legs, wrenched the reins out of Larry's hands, so that they broke off short, and ran away!

“‘Begorra, we are in for it now,’ he shouted. ‘Hould on by your eyelashes, miss; we will just slip off quietly at the first corner. Kape yourself calm! Bad scan to you for a red-haired divil’ (to the mare). ‘Bad luck to them for rotten ould reins’—reins now represented by two strips of leather, trailing in the dust.

“‘Oh! murder, we are done!’ he cried, as he beheld a heavily-laden turf-cart, drawn up right across the track. ‘Oh, holy Mary! she’ll put us in the bog.’

“The owner of the turf-cart was toiling up the bank with a final creel on his back, when he beheld the run-aways racing down on his devoted horse and kish. His loud execrations were idle as the little evening breeze that was playing with the tops of the rushes and the gorse. Finnigan's mare was already into them! With a loud crash and a sound of splintering shafts, a thousand sods of turf were sent flying in every direction. The young lady was shot off the car and landed soundly and safely in a heap of bog-mould that luckily received her at the side of the road. Larry also made

a swift involuntary descent ; but, in a twinkling, had sprung to his feet, and seized his horse's head, calling out to his companion as she picked herself up : ' 'Tis yourself that is the fine souple young lady, and not a hair the worse ; nayther is the mare, barrin' a couple of small cuts, and one of the shafts is broke. Faix, it might have been an accident.'

" 'Arrah, what sort of a driver are ye, at all ?' shouted the owner of the turf-cart, breathless with rage and haste. ' Oh, 'tis Larry Flood, an' I might have known !'

" 'And what call have you to be taking up the whole road ?' retorted Larry loudly. ' The devil sweep you and your old turf kish that was nearly being the death of us !'

" 'Ah, and sure wasn't she running away as hard as she could lay leg to ground ?'

" 'Well, and if she was ; didn't she see you below in the bog, and take you for a scare-crow ? And small blame. Here, don't be botherin' me, Tim Moony, but lend a hand to rig up the machine, and the tackling.'

" Thanks to the turf-cutter's generous assistance, in a very short time Mr. Larry Flood was enabled to come forward and announce to his fare, who had dusted her dress from bog-mould and taken a seat on a piece of wood, that, ' He was ready, if she was.'

" The young lady accordingly rose and followed him, and gravely inspected the turn-out. The car was all down on one side, the result of a spring broken in the late collision ; but the reins had been knotted together, and the shaft was tied up with a piece of twine.

" 'It will hould all right,' said Larry, following her eyes. ' Anyway, it will carry your distance, I'll go bail.'

“‘Thank you, but I am not going to try the experiment. I’m stiff enough as it is; and one fall in the day is ample for the present.’

“‘Fall! What fall? Sure ye only jumped off the car.’

“‘All the same, I shall walk, fall or no fall,’ returned his late passenger.

“‘You are a good mile off it yet,’ expostulated Larry. ‘How will you get there?’

“‘On foot.’

“‘And your bag. Is that going on foot as well?’

“‘Perhaps you would leave it as you pass.’

“‘Indeed and I will. Of course you are only English, and what could ye expect; but, at the first go off, you were stout as any lady that ever sat on a car.’

“‘Stout?’ she echoed in supreme amazement. But perhaps in Ireland things had different names.

“‘I mane stout-hearted! And now, after all, you are going to walk! To walk!’ he reiterated, with indescribable scorn.

“‘Yes,’ she replied, ‘and you will take the bag—it has no neck to break.’

“‘To be sure; I’ll lave it with pleasure. But——’ and here he paused rather significantly.

“‘Of course I’ll pay you,’ she said, fumbling for her purse. ‘How much?’

“‘Oh, well, sure—nothing at all! I would not be charging the likes of you. ’Twas an honour to drive such a beautiful young lady.’

“‘How much?’ she repeated, with a stamp of her little foot.

“‘Well, then, miss, since you are so detarmined, we won’t quarrel over two half-crowns; and if you would like me to drink your health in the best that was,’

rubbing his mouth expressively with the back of his hand, 'we will say six shillings.'

"The girl immediately placed six shillings in his greedy palm.

" 'Thank you kindly, my lady! and may you live seven years longer than was intended for you. It's not my fault that I did not lave you at your journey's end, as Tim Moony will allow. There's the mare,' waving his hand towards the wicked-looking chestnut; 'there's the machine,' indicating the battered car and twine-tied shaft; 'and they are both altogether, completely, and entirely at your service.'

"The young lady shook her head resolutely, and made no other reply.

" 'Well, then, miss, as I see I can't tempt ye, I suppose I may as well be going, and I'll lave the bag inside the lodge. Keep on straight after the cross, till you come to a pair of big gates, and there you are.'

"Having given these directions, and ascended to the driving-seat, so as to have what he called, 'a better purchase on the baste,' Larry muttered a parting benediction, lifted his caubeen, and drove furiously away."

Thus ended this eventful drive on an Irish car. Larry Flood is an excellent example of a humorous, dare-devil young Irishman of the lower class; but it is not with such characters that one has always to deal in Ireland! Sometimes the humour and pluck are both wanting, and in their place we find cunning and cruelty. It is not such men as Larry Flood who become midnight assassins and who ill-treat and mutilate dumb and inoffensive animals. It would be a happy thing for Ireland if the perpetrators of such cruelties and the assassins who lie in ambuscade could be brought to

justice and punished as they deserve ; but the most cowardly and the most deserving of blame are those better educated persons who, when speaking in public, incite the lower classes to such deeds by their inflammatory and unprincipled language. But to return to the subject of Irish roads and the public conveyances used thereon.

The Irish roads are excellent ; they are as good, if not better than English roads ; but when coaches were running in England in vast numbers from every town, the communication between Irish towns was very bad. Notwithstanding the fact that there was an abundant supply of horses and plenty of unemployed outside jaunting-cars, it was left for a young Italian picture-frame maker, a man with small capital but indomitable energy, to establish a proper system of stage-carriages in Ireland.

Bianconi was born in 1786 at the small village of Tregolo, which lies on the Italian side of the Alps, not far from Como and Milan. The district is known for its extreme beauty ; it is moreover celebrated for the rearing of silk-worms, the finest silk in Lombardy being produced in the neighbourhood. Indeed, it is difficult to say what could have induced young Charles Bianconi to have quitted so beautiful a spot and one which offered so many opportunities of employment, only to exchange the blue skies of Italy for the humid and depressing atmosphere of Ireland. Although the Italian peasantry may be poor, the Irish are certainly poorer, consequently the opportunities for making money must have been rather in favour of the home of his birth than of the home of his adoption. It may be that he wished to escape conscription. He had three brothers and one sister ; he was sent to school at an

early age, but his early education proved a complete failure ; he was a wild, plucky little chap, but a tremendous dunce. Mr. Smiles says that " Teaching had as little effect upon him as pouring water on a duck's back." He left school at sixteen years of age. It appears to have been a constant practice for workmen in the neighbourhood of Como to quit their homes and emigrate to England, where they might follow their various trades with greater profit than at home.

Bianconi's father arranged with a man named Andrea Faroni to take the lad with him to England, and instruct him in the art of hawking prints. Bianconi was to be apprenticed to this trade for eighteen months, at the end of which time, if he did not like his occupation, he was to be removed to the care of an old friend of his father's named Colnaghi, who was a print-seller in London. This man afterwards made a large fortune and a considerable reputation. Bianconi's mother seems to have been very much attached to him ; there was a little banquet given in his honour, and at which the whole family were present, shortly before he left Italy. On this occasion his mother was so grieved at parting with him that she fainted. Just as he was leaving his home at Tregolo, he heard her last words, which were : " When you remember me, think of me as waiting at this window, waiting for your return." And yet it appears he never did return, although he afterwards became a wealthy man, which does not say much for his filial affection. Three other boys accompanied Faroni to Ireland ; they did not stay in London *en route* but went straight to Dublin. This was in the summer of 1802. When Bianconi went into the streets of Dublin to sell his prints, he could not speak a word of English. He used to hold up his

fingers to indicate the number of pence he wanted for his goods. When he afterwards learnt English, Faroni used to despatch him every Monday morning with about forty shillings' worth of prints, telling him to sell them as fast as he could, and then to return home. The only money he received at starting was fourpence. Faroni would say: "While you have goods you have money; if you want money make haste and sell your goods." At the end of eighteen months Bianconi's apprenticeship was up; Faroni then offered to take him back to his father in Italy, but he preferred to remain in Ireland, where he started in business for himself. He wandered about the country selling his prints, but at last growing tired of this sort of life, he settled at Carrick-on-Suir as a carver and gilder and print-seller. Not getting on very well there he removed to Waterford, and made a third removal in 1809 to Clonmel. Here his trade flourished, but he had never forgotten the long journeys he formerly took on foot when wandering about Ireland as a hawker.

At Clonmel he began to employ assistants in his trade, and kept three German gilders at work at this time. He seems to have been imbued with a perpetual spirit of mischief. On one occasion he suffered in consequence.

He was driving a car from Clonmel to Thurles, and he had with him a large looking-glass with a gilt frame upon which he had expended a fortnight's labour. Moved by some spirit of mischief, he began to tickle the horse he was driving with a straw; the result was that the animal ran away down a steep hill, the car was capsized and smashed to pieces, and the glass was shivered into a thousand atoms.

On another occasion a man was carrying to Cashel on his back one of Bianconi's large mirrors. An old woman by the road-side, observing the carefully wrapped-up package, asked what it was. Bianconi, who was close behind, answered that "It was the Repeal of the Union." The old woman was so delighted that she knelt down on her knees in the middle of the road, and thanked God for having preserved her in her old age to see what she and all Ireland had been longing for, for years past.

At the time of the war between England and France, when Napoleon was at the zenith of his glory, gold was at a premium in Ireland; a guinea was worth about twenty-six or twenty-seven shillings. Bianconi began to buy up the guineas from the peasantry, which he afterwards sold at a profit to the bankers. But, about this time, he was impressed with the necessity of providing proper conveyances for the poor.

When Mr. Wallace, Chairman of the Select Committee on Postage in 1838, asked Mr. Bianconi what induced him to commence his car establishment, his answer was: "I did so from what I saw after coming to this country of the necessity for such cars, inasmuch as there was no middle mode of conveyance, nothing to fill up the vacuum that existed between those who were obliged to walk and those who posted or rode. My want of knowledge of the language gave me plenty of time for deliberation; and, in proportion as I grew up with the knowledge of the language and the localities, this vacuum pressed very heavily upon my mind, till at last I hit upon the idea of running jaunting-cars, and for that purpose I commenced running one between Clonmel and Cahir."

The beginning that Bianconi made was a very small one, it was only one ordinary jaunting-car drawn by a single horse, capable of accommodating six persons; it ran between Cahir and Clonmel, a distance of about twelve miles, and commenced on the 5th of July, 1815; until then, passengers were forced to ride on coaches, and the fares were so high that the poorer class could not possibly afford to pay them. The fare on the car betwixt Clonmel and Cahir was eighteenpence. At first scarcely any one would go by the car; people preferred to walk, rather than spend their money. The car sometimes ran for weeks without a passenger. Bianconi, finding this to be the case, started an opposition car. No one knew of it but himself, not even the driver of the opposition car, since the affair was managed with such secrecy; but, no sooner was the opposition car started, than the people began to patronise both cars. There were races between the car-drivers, then there was the excitement of the contest which just suited the Irish lads, and attracted the attention of the public; the people took sides, and, before very long, both cars came in crowded. After a time the opposition car broke down, and still Bianconi's original car was as full as ever.

During the same year, 1815, he started another car between Clonmel, Cashel, and Thurles, so that all the principal towns of Tipperary were connected together by car traffic. Men of business, commercial travellers, and farmers, and even peasants were delighted with this new state of things; before the cars were started it took a man a whole day to walk from Thurles to Clonmel, whereas now he could travel backwards and forwards in one day, and

have five or six hours for transacting his business. The next year, 1816, Bianconi started a car from Clonmel to Waterford. The new cars were well appointed, and the men who drove them were good coachmen; before this the jaunting-cars had been in a very bad condition, the drivers, too, were a drunken lot. Mr. Smiles says: "They were often very reckless, and that a car-driver on one occasion said to his passenger, 'Will I pay the pike or drive at it, please your honour?'"

Sam Lover told a tale of a car-driver, who, at the end of a long journey over very bad roads, asked his fare for something extra.

"Faith," said the driver, "it's not putting me off with this ye'd be, if ye knew but all," whereupon the passenger gave him another shilling.

"And now," said the passenger, "what do you mean by saying, 'If ye knew but all'?"

"Why," said the carman, "I druv yer honour the last three miles without a linch-pin."

Bianconi now commenced to build his cars for himself, at the same time he kept on his carving and gilding shop, and still sold engravings and picture-frames, until at last he was forced to give the shop up and stick to the cars.

The car from Clonmel to Waterford was at this time his most triumphant feat; the distance was thirty-two miles, and the fare was three-and-sixpence. In 1818 he established a car between Waterford and Ross, the next year a car between Waterford and Wexford, the year following a car between Waterford and Enniscorthy. A few years later he ran cars between Waterford and Kilkenny, and Waterford and Dungarven, and other cars were speedily



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BIANCONI'S CARS. 1856

A Car arriving at Commin's Hotel, Waterford.



put upon the road completing the communication north, east, and west. So much had the traffic increased that a hundred passengers frequently passed between Clonmel and Waterford during the day.

At the Waterford election of 1826, the Marquis of Waterford's party, or rather the Beresford party, who were all-powerful, asked Bianconi to supply them with cars; this he did; but the most powerful party was not the most popular. The popular party started a candidate and asked Bianconi to help them, but this he could not do, as his cars were all engaged by the Beresford party. The morning after his refusal Bianconi was pelted with mud, and some of his cars and horses were thrown over the bridge into the river. Bianconi thereupon wrote to the Beresford agent desiring to be released from his engagement; on receipt of his letter the Beresford party very generously gave him his release; he then engaged with the popular party, and was instrumental in winning the election for them. For this he was paid the sum of one thousand pounds; thereby he was enabled to extend his business. The year after the Waterford election he found time to get married to a young Irishwoman, Eliza Hayes, who was twenty years younger than himself, he being forty years of age. At this time he took great interest in politics; he was a great ally of O'Connell. He had now established communication between Clonmel and Cork, and extended this communication northward through Mallow and Limerick, and so on from Limerick to Tralee, and from Tralee to Cahirciveen on the south-west coast of Ireland. Communication was also established northward from Thurles to Roscrea, Ballinasloe, Athlone, Roscommon and Sligo, and all the principal towns in the north-west

of Ireland ; in fact, all the market-towns were brought into communication one with another. So, in time, Bianconi succeeded in establishing a perfect system of car communication throughout Ireland, conveying passengers at the rate of one penny farthing a mile. At first the cars were small jaunting-cars, but after a time their size was very much increased. Some cars had four wheels and some two, and four horses in place of the one animal with which he commenced business. The large four-horse cars carried seventeen passengers. The light, fast cars on two wheels were called "Faugh-a-Ballagh," or "clear the way."

When Bianconi's system was fully established, he had a hundred cars on the road, a hundred and forty stations for changing horses, a hundred drivers, thirteen hundred horses which performed an average distance of three thousand eight hundred miles daily, passing through twenty-three counties, and calling at a hundred and twenty of the principal towns and cities in the south and west and midland counties of Ireland. Bianconi's horses consumed on an average from three to four thousand tons of hay yearly, besides an enormous quantity of oats. Owing to the establishment of Bianconi's cars, the fishermen of Galway and the entire west coast of Ireland were able to send their fish to market at the large towns, in consequence of which they were delivered on the day after they were caught. There is something very sad in the fact that, even at the present day, the Irish do not take advantage of the good things that lie almost within their grasp. The Galway fisheries are greatly neglected ; both the sea and the land are extremely prolific, the land being capable of excellent cultivation, whereas the sea is teeming with fish ; besides which the land is



PHOTOGRAPH BY H. J. HARRIS, HARRIS & CO., LIMITED

BIANCONI'S CARS, 1856

Springing them.

rich in mineral wealth ; there is copper in Wicklow, Waterford, and Cork, iron ore in Leitrim, Kilkenny, and Ulster. In County Connaught there is coal mixed with the iron ore. In parts of Ireland there is excellent porcelain clay, suitable for pottery manufacture. But if the land has been unexplored and unworked, the sea has been almost totally abandoned. All round the west coast of Ireland there are enormous shoals of fish which are consumed, not by Irishmen, but by swarms of sea-birds which follow and devour them, or by foreign fishermen who come all this long way to reap the harvest of the sea, which by right should fall to the share of the Irishmen living along the coast. It cannot be for want of harbours, as there are any number of natural harbours. The greater number of the boats which take part in the fishery are from the Isle of Man, Devonshire, Cornwall, Wales, Scotland, and even from France. Whilst the Irish fishermen are diminishing in number, the strangers are increasing. Regularly every year Scotch fishing-boats leave Cockenzie, in the Firth of Forth, for the herring fishery off Kinsale in Ireland, the Scotchmen at that place having provided themselves with fifty decked fishing-boats, each costing, with nets and gear, about five hundred pounds. So profitable was their Irish fishing, that, with the aid of Lord Wemyss, they built themselves a harbour instead of appealing to the Government to do so ; such is the difference between the Scotch and the Irish character. So rich in fish are the seas around the west coast of Ireland that the Dutch, in the reign of Charles the First, were admitted to these Irish fisheries on the payment of thirty thousand pounds ; in fact, these seas abound with myriads of every kind of fish in common use,

cod, ling, haddock, hake, mackerel, herring, whiting, conger, turbot, brill, bream, soles, plaice, dories, and salmon. And yet Scotland imports eighty thousand barrels of cured herrings every year into Ireland, most of which have been caught off the Irish coast. The newspaper, *Land and Water*, remarks that "The fishing at Kinsale is so enormous that mackerel are sold at one shilling for six score, that piles of magnificent fish lie rotting in the sun, or are thrown back into the sea." This great and wicked waste is attributable to the scarcity of packing-boxes in which to send them away, but more probably from a want of energy on the part of the inhabitants. What is wanting is the industrial element; in fact, as Sir Rowland Hill said when engaged as one of the Royal Commissioners on Railways, in examining witnesses as to the fish traffic, "The Irish will neither fish themselves, nor allow any one else to fish, if they are in sufficient numbers to drive the invading fleet of fishermen away."

But, to return to Bianconi's cars. What I have said respecting the Irish fisheries, the mineral wealth of the country, and the prolific nature of the soil, all goes to prove that Ireland is endowed by Nature with considerable wealth; that if there is poverty and destitution the fault rests, not with the natural features and productions of the country, and the seas along its coasts, but with the inhabitants, and those who politically influence their welfare. Had Bianconi been an Irishman and not an Italian, his marvellous system of cars would never have been established; and had he been from the South of Italy and not from the North, I believe the lack of energy would have been as apparent as though

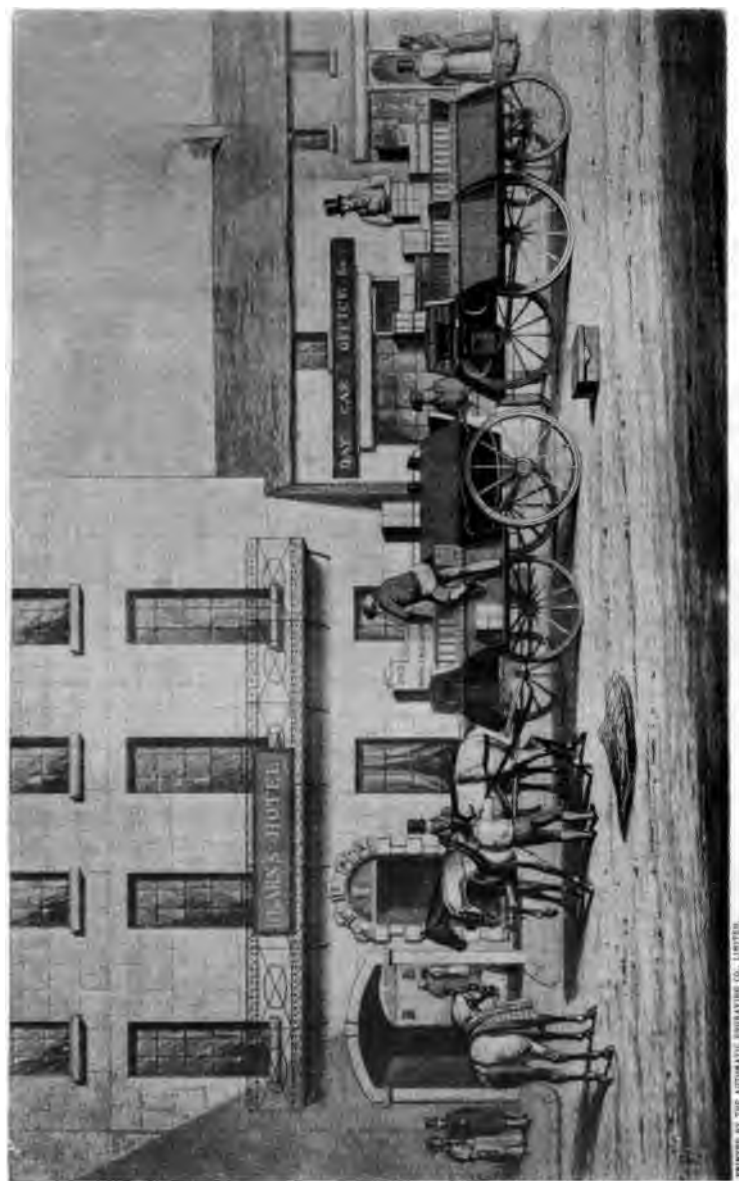
he had been an Irishman. The Italians of North and South Italy are as different in character as the English are from the Irish, or the Irish from the Scotch ; one has only to visit Naples, Ancona, Turin, and Milan to observe the vast difference there is between the inhabitants of the Northern and Southern towns. The Northerner is in every way superior to the Southerner ; he is more cleanly in his person and surroundings, more industrious, more frugal, and more painstaking. When the Italian from the North is busily and actively engaged, the Southerner is basking in idleness, waiting for the good things to come to him, and never stirring hand or foot to approach nearer to them.

Bianconi's cars enabled tourists to visit those parts of Ireland renowned for their magnificent scenery, their historical interest, or the sport they afforded. A very singular thing about Bianconi's cars was that no matter how much the country was disturbed, they were never molested ; every one was his friend. Even during the Whiteboy insurrection the cars met with no interference, and the mails they carried for the Government always travelled in safety.

Bianconi, at a meeting of the British Association in 1857, said that, "Although his cars had been established for forty-two years, they had never met with the slightest injury from the people, neither had any of his property suffered at their hands."

When his cars were first established on the road the mail-bags were carried by men on foot or horseback, sometimes by lads riding mules, but the delivery was very irregular. About this time Bianconi offered to carry the mails for half the price hitherto paid ; he obtained the contract, and eventually carried the post

in place of the mail-coaches. At one time the coach proprietors were his great opponents ; but, no sooner had he shown people that it was possible to succeed with his cars, than there sprang up plenty of persons anxious to do the same thing ; but none of these had the power of organisation such as was possessed by Bianconi. Consequently they one after another failed in their efforts to compete with him. He exercised a very strict discipline over his drivers, yet he never failed to reward those who deserved it. He promoted the younger men to better positions according to their respective merits and whenever there were vacant berths. He provided for all who were injured or incapacitated by age or sickness. The consequence was that he was literally worshipped by those he employed ; his men were always sober ; if any of his car-drivers were found to be drunk they were dismissed. When in conversation with any of his men, he had a very charming way of making them feel that they conferred a greater benefit on him when serving him than he did when paying them their wages. When railroads were established in Ireland they broke up Bianconi's long-established system of car communication. He had to take a thousand horses off the road and thirty-seven cars, and yet he was not disheartened, but remodelled his entire system so as to run his cars between the railway stations and the towns and villages at a distance from them. After this he went further afield, and directed his attention to those remoter parts of Ireland which had not hitherto had the advantage of public conveyances. In 1861 he employed nine hundred horses travelling over four thousand miles daily ; but in 1866, when he resigned his business, owing to ill-health, he was



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BIANCONI'S CARS, 1858
Preparing for a start at Hearn's Hotel, Clonmel.

running only six hundred and eighty-four miles daily below the maximum run in 1845, before the railways had begun to interfere with his traffic. At the age of seventy Bianconi might have been seen at Clonmel, helping at busy times to load the cars; even when near upon eighty he still continued to manage his immense business, extending over two thousand five hundred miles of road. In 1831 he became a naturalised British subject; in 1844 he was elected Mayor of Clonmel; he was re-elected Mayor in the following year; in 1846 he bought the estate of Longfield in County Tipperary: it consisted of a thousand acres of land with a mansion-house overlooking the River Suir; to this he added more land. One of his favourite sayings was, "Money melts, but land lasts." He founded, with O'Connell, the National Bank of Ireland. His own family and that of O'Connell became closely intermarried; Bianconi's son married O'Connell's granddaughter, and O'Connell's nephew married Bianconi's daughter. His son died in 1864, leaving no male heir to inherit the estates; the following year the poor old gentleman, who was seventy-eight, met with a severe accident, when his thigh was badly fractured; this forced him to retire from business; he thereupon handed over the whole of his plant, consisting of cars, horses, harness, and stables to his employés.

About this time he lost his eldest daughter, who died in Italy. He built a beautiful mortuary chapel close to his house, and here he laid the remains of his son and daughter, employing Italian sculptors to beautify the interior. He died himself in 1875, in his ninetieth year, and was interred in this mausoleum close beside his son and daughter.

I am indebted to Mr. Smiles for much of this

information respecting Bianconi; this gentleman having written a very interesting sketch of his life, which appeared first in *Good Words*, and was afterwards reproduced in another form. I have also from other reliable sources obtained information on this subject; but it is exceedingly difficult to do so, as no book of reference, and indeed very few books on Ireland contain any information on the subject. In fact, the word "car" is not to be found in any Encyclopædia; consequently, it is difficult to trace the history of the Irish car, which has now become inseparably connected in our minds with Ireland and the Irish.

I have in my possession an old book containing maps of the roads of Ireland, surveyed in 1777 and corrected down to 1783, in which year (1783) it was published by T. Longman, Paternoster Row, London; at the same time there was published a "Post-Chaise Companion to Ireland." But these books, although furnished with notes, do not contain a word about mail or stage-cars; in fact, these books, one of which I hold in my hand, were published three years before Bianconi was born. The road-book of Ireland that I have mentioned, and which was compiled by Messrs. Taylor and Skinner, is a hundred and four years old.

Before Bianconi established his system of cars, it is evident that cars were not employed as public stage conveyances. Of course there were cars to be hired, but these were of the most primitive description; in many cases they had no springs, and as the roads were in those days in very bad condition, they must have been very uncomfortable to ride on. In many cases they were mere rough boards raised above and supported on an axle to which two badly made wheels were attached.



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HACKNEY CARRIAGES AND STREET TRAFFIC
The Bank of England and Royal Exchange.



CHAPTER IV.

HACKNEY-COACHES, CABS, AND STAGE-CARRIAGES.

Hobson's choice—Origin of hackney-carriages—Hackney-coaches in Paris—The first cab-stands—Cabs—Police supervision—Acts relating to hackney-carriages—Abstract of Acts—Mrs. Prodgers—A smart hansom—S. and T.—Station broughams—Amateur cabmen—Growlers—Stage-carriages—First omnibuses—Acts relating to the same—Omnibus companies—Tramways and tram-cars—Steam and electric tramways.

I do not think that a work on Highways and Horses is complete without some mention of hackney-carriages. A hackney-carriage is a carriage kept for hire and exposed in the streets for that purpose. The derivation of the word "hackney," seems to have more to do with the horse than the vehicle to which he is harnessed. Hackney-coaches were said to be derived from the French *Coche-à-haquenée*, a vehicle with a hired horse, *haquenée*. That they originated in Hackney, near London, is a mistake.

The word "hackney" was evidently first applied to horses let for hire, and then, by a very natural transition, extended itself to carriages; these horses being used exclusively on the road may, perhaps, also have originated the word "hack," as applied to a horse used exclusively on the road.

Cabs of all descriptions are hackney-carriages; they are also sometimes called "flys." The word "cab" is evidently derived from *cabriolet*, which is frequently called cab; it is a one-horse vehicle, and was introduced in the streets of London in 1823.

A fly is also a hackney-carriage ; it is a contraction of " fly-by-night," as sedan-chairs on wheels used to be called during the Regency. These fly-by-nights were patronised greatly by George, Prince of Wales, and his companions, during their stay at Brighton, and were invented in 1809, by John Butcher, a carpenter of Jew Street.

Hackney-carriages in use in country towns are frequently called " flies ;" the word " fly " is, as I have said, a contraction.

Tobias Hobson was the first man in England who let out hackney-horses ; he was a carrier of Cambridge, apparently well-to-do, since his biographer says that he made a much greater fortune than a thousand men educated in that University ever acquired, or were capable of acquiring. The following account was given of him in the *Spectator* :

" Mr. Tobias Hobson was a very honourable man, for we ever shall call the man so who gets an estate honestly. He was a carrier, and being a man of great abilities and invention, saw where there might good profit arise, though duller men overlooked it ; this ingenious man was the first in this island who let out hackney-horses. He lived at Cambridge, and observing that the scholars rid hard, his manner was to keep a large stable of horses, with boots, bridles, and whips, to furnish the gentlemen at once, without going from college to college to borrow, as they have done since the death of this worthy man. Mr. Hobson kept a stable of forty good cattle, always ready and fit for travelling ; and when a man came for a horse, he was led into the stable, where there was great choice ; but he obliged him to take the horse which stood next to the stable door, so that every customer was alike well served according to his chance, and

every horse ridden with the same justice ; from whence it became a proverb, when what ought to be your election was forced upon you, to say, 'Hobson's choice.' This memorable man stands in fresco, at the 'Bull Inn' (which he used) in Bishopsgate Street, and a hundred pound bag under his arm, with this inscription upon the bag, 'The fruitful mother of a hundred more.'"

Hobson, it will be observed, let out horses and not carriages ; but as I have before explained, the term "hackney" related to horses and not to carriages, and it was only by a transition that it afterwards became adapted to vehicles. Hobson died at the time of the Plague in 1630, in the eighty-fifth year of his age. Milton wrote two epitaphs on him. There is also a poem called "Hobson's Choice," which was printed in a folio pamphlet entitled "The Choice," by Pomfret.

Hackney-coaches were first established at Edinburgh in 1673. (Arnot's "History of Edinburgh," page 597.)

In 1679, at the Rebellion, the hackney-coach horses of Edinburgh were employed to draw the Royal Artillery ("Maitland's History," page 338), thus acting in the service of the King as stipulated.

Hackney-carriages were first introduced into Warsaw, in Russia, in 1778. In Copenhagen, about the same time, there were about one hundred hackney-coaches. In Madrid were a large number ; and also in Vienna there were two hundred hackney-coaches. In 1663 coaches with wheels were forbidden in Amsterdam, being considered destructive to the pavement ; but in 1775 their number had increased so much that there were twenty-five thousand coach-horses in the seven united provinces. Charles Vilerme paid into the treasury of the King of France fifteen

thousand livres for the exclusive privilege of keeping coaches for hire within the city of Paris ; this occurred in about the year 1655. Shortly after this hackney-coaches were kept standing at certain places in different streets, to go from one part of the city to another. A full history of the Parisian *fiacres*, and the orders respecting them, may be seen in "Continuation du Traité de la Police, Paris, 1738," fol., p. 435 ; and also, "Hist. de la Ville de Paris, par Sauval," vol. i., p. 192.

When in 1823, cabriolets were introduced first into the streets of London as vehicles for hire, they differed from the fashionable cabriolet, afterwards driven by gentlemen, behind which a little groom, called a tiger, stood upright and hung on, insomuch as the driver of the hired cabriolet or cab sat beside his fare ; this being the case they did not resemble a private cabriolet, but were in almost every particular identical with the hooded Stanhope gig, since the two passengers sat side by side. The carriage possessed a leather hood, and had no other seat.

Hackney-coaches were first introduced into France in the year 1650, by one Nicolas Sauvage, who lived in a house called the Hôtel St. Fiacre, from which circumstance all hired carriages came to be called *fiacres*, although eventually the name was restricted to such as were stationed for hire in the streets.

It should be observed, however, that in ancient Rome there were carriages let out for hire which Suetonius called *rheda meritoria* and *meritoria vehicula*.

It was in the year 1625 that hackney-carriages first began to ply for hire in the streets of London, and sometimes at the inns, to be called for as they were wanted. At the first they were only twenty in number. In 1634, sedan-chairs appear for the first time to have

entered into competition with the hackney-carriages; they were owned in that year by Sir Sanders Duncomb. In the following year an attempt was made to check the increasing annoyance occasioned by the general and promiscuous use of hackney-coaches by a proclamation from the King, Charles I., that no hackney or hired coach should be used in London, Westminster, or the suburbs, unless it were engaged to travel at least three miles out of the same, and that every hackney-coach owner should constantly maintain four able horses for the royal service when required. Finding it impossible to prevent the use of so great a convenience, a commission was issued to the Master of the Horse in 1637 to grant licenses to fifty hackney-coachmen in and about London and Westminster, and as many others as might be needful in other parts of England, each proprietor being allowed to keep not more than twelve horses.

In 1652 the number of hackney-coaches daily plying in the streets was limited to two hundred, in 1654 it was increased to three hundred, allowing, however, only six hundred horses, and an increase was at different times allowed till 1771, when the number of hackney-carriages was further increased to a thousand. Notwithstanding this steady increase in the use of hackney-carriages, they were long assailed as a public nuisance. The first hackney-coach stand was established in 1634 by Captain Baily, near the "Maypole," in the Strand; * before then they had either stood at the inns waiting to be sent for when they were wanted, or they were driven slowly about the streets; but in 1634 there was established, for the first time, a proper hackney-cab stand in the middle of the street, where they could pull up, feed their horses, and wait to be hired.

* See Chapter VII., "Past and Present."

Even so late as 1660 Charles II. issued a proclamation against hackney-coaches standing promiscuously at street corners to be hired. But although down to the year 1823 the London hackney-coachmen enjoyed a monopoly which remained undisturbed, yet the hackney-coach at this time was never worse. The hackney-coach had hitherto been drawn by two horses, and was a huge, lumbering vehicle, uncommonly slow and uncomfortable to ride in. Whilst this was the state of things in London a lighter carriage, called *cabriolet de place*, had been brought into extensive use in Paris ; but it was not till 1823, and then with great difficulty, that licenses were obtained for cabriolets to ply for hire in London at fares one-third lower than those of hackney-coaches. The new vehicle was a hooded chaise drawn by one horse and carrying only one passenger besides the driver, who sat side by side with his fare as I have said before. An improved build was soon introduced by which room was provided for a second passenger, and the driver was separated from his fare.

With the rapid extension of a lighter class of vehicle, numerous varieties of construction were introduced, some providing for three or four passengers, some were on two wheels, others on four ; but all were drawn by one horse, and the word "cab" was used for the first time in connection with a hackney-carriage, and so they have ever since been called, no matter what their construction, provided they plied for hire as hackney-carriages. All restrictions as to number ceased in 1831, by an Act 2 Wm. IV. ; the fare was then one shilling a mile.

The office for the licensing of hackney-carriages was removed to Somerset House in 1782. The lost

and found office, for the recovery of property left in hackney-coaches, was established by Act 55 Geo. III. ; in the year 1815, by an Act 16 and 17 Vict., the control of public vehicles was placed in the hands of the Commissioners of Police; this occurred in June and August, 1853.

By Act 1 and 2 Wm. IV., c. 22, it is declared that every carriage with two or more wheels plying for hire in public, within five miles of the General Post Office in London, of whatever form or construction, or whatever may be the number of persons which it shall be calculated to convey, or the number of horses by which it shall be drawn, it shall be deemed a hackney-carriage.

The rise and progress of hackney-carriages in London may be distinctly traced from notices in MacPherson's "Annals of Commerce," and Anderson's "History of Commerce." In 1844, 4627 cabs were licensed for hire ; besides this, 371 watermen received licenses permitting them to ply for hire. About two hundred years ago the inhabitants of London made use of watermen's boats on the Thames, quite as much as they now make use of cabs.

According to the laws at present prevailing with regard to hackney-carriages, every such carriage must receive a certificate from the Commissioners of Police, by whose authority the vehicles may be inspected. If upon inspection it be approved of, the Commissioners grant a certificate stating how many persons the vehicle is permitted to carry. On the presentation of this certificate, the Board of Inland Revenue may grant a license. The Police Commissioners are empowered at any time, deemed by them proper, to order an inspection of metropolitan and hackney-carriages and horses. If any of them are found in improper

condition, notice thereof is sent to the proprietor ; if he neglects to attend to this warning, the Commissioners may suspend his license for a stated time, and take away his stamped office-plate until after the expiration of that time.

By the Act 16 and 17 Vict., c. 33, of 1853, the fare for London hackney-carriages was fixed at sixpence for every mile or fraction of a mile, and two shillings per hour ; sixpence per quarter of an hour was allowed for waiting or detention ; each carriage was to be provided with a table of fares, placed conspicuously, so that the passenger could see it, and each driver with a book or card of fares which he was to produce when required. The driver must not refuse to carry a fare, if the distance be within six miles, or the time likely to be occupied in such a journey within an hour. Beyond these limits he may exercise an option, or discretion. When hired by time, the driver is not bound to go more than four miles an hour, unless paid sixpence per mile extra ; a reasonable quantity of luggage is to be taken free of charge ; lamps are to be lighted on the carriages of a night ; the police are to have control over all cab-stands. In cases where a hackney-cab is drawn by more than one horse an addition of one-third may be made to the fare ; the driver may refuse to charge by time instead of distance between eight in the evening and six the following morning. If more than two persons ride in a hackney-carriage, sixpence is charged over any distance beyond the regular fare. All the above provisions came into force by the above-mentioned Act, and were compelled by fine or imprisonment. The above Act related chiefly to hackney-carriages in connection with the public ; another Act relating to their connection with the Revenue was

passed in the same year ; the old duties were repealed and lower duties imposed ; the license for every hackney-carriage was made two pounds, and the duty six or seven shillings, according as the carriage was worked six or seven days in the week. Every license was for one year only, and was to be renewed annually. This Act was 16 and 17 Vict., c. 127, and it raised the fare from sixpence to a shilling a mile.

On the 10th of March, 1871, a further order was made with regard to hackney-carriages plying for hire within the metropolitan area or circle, or four-mile radius from Charing Cross. It was as follows, and still remains in force :

ABSTRACT OF THE ACTS FOR REGULATING HACKNEY-CARRIAGES.
Extract from Order made in pursuance thereof, 10th of March, 1871.

7. A number-plate is to be fixed in a four-wheel cab on the back panel, in a two-wheel cab on the back under the driver's seat.

8. The Inspectors shall at the same time cause to be affixed to the cab a fare plate, which, in a four-wheel cab, shall be in the inside underneath the front windows, and in a two-wheel cab on the inside of the splash-board.

12. A license for hackney or stage-carriages shall continue in force for one year, and such license shall be subject to revocation or suspension for any period as may be willed by the Commissioners.

19. If a cab carry a greater number of persons than the number it is licensed to carry, the driver and also the proprietor, if he be cognisant of the fact, shall be deemed to have committed a breach of this order. For the purpose of this regulation, two children under ten years of age shall count as one person.

20. The hiring shall be by distance or by time, as the hirer may express at the commencement of the hiring, but unless so expressed it shall be taken as by distance.

21. The fare for the hiring of a cab which is both hired and discharged within the four-mile circle shall be regulated as follows :

(1.) Where the hiring is by distance then whether the cab is four-wheel or two-wheel, the fare shall be :

(a.) If the distance does not exceed two miles—	s.	d.
For the whole distance	1	0
(b.) If the distance exceeds two miles—		
For each mile of the whole distance	0	6
For any part of a mile over and above any number of miles completed	0	6

together with such extra payments (if any) as the driver may, under this order, be entitled to charge in the cases hereinafter mentioned.

Where the hiring is by time the fare shall be :

	For a four-wheeled carriage.		For a two-wheeled carriage.	
	s.	d.	s.	d.
(a.) If the time does not exceed one hour—				
For the whole time	2	0	2	6
(b.) If the time exceeds one hour—				
For each quarter of an hour of the whole time	0	6	0	8
(c.) For any period of less than fifteen minutes, which is over and above any number of periods of fifteen minutes completed, shall be taken as included in the said fifteen minutes	0	6	0	8

together with such extra payments (if any) as the driver may, under this order, be entitled to charge in the cases hereinafter mentioned.

23. The fare for the hiring of a cab, which is hired within, but discharged without, the four-mile circle, shall be regulated as follows :

(1.) When the hiring is by distance, then, whether the cab is a four-wheeled carriage or a two-wheeled carriage, the fare shall be :

	s.	d.
(a.) If the distance does not exceed one mile—		
For the whole distance	1	0
(b.) If the distance exceeds one mile—		
For each mile ended within the four-mile circle ...	0	6
For each mile ended without the four-mile circle ...	1	0
For any part of a mile ended without the four-mile circle, over and above any number of miles completed ...	1	0

together with such extra payments (if any) as the driver may, under this order, be entitled to charge in the cases hereinafter mentioned.

(2.) Where the hiring is by time, the fare shall be the same as if the cab had been hired without the four-mile circle.

24. Whether the hiring be by distance or by time, the driver shall be entitled to charge, in addition to what is due to him for distance or time as the case may be, the following extra payments in the following cases respectively :

(1.) If any luggage is carried outside the cab he shall be entitled to an extra payment of 2d. for each package carried outside, whatever may be the number of persons carried within.

(2.) If at any time during the hiring more than two persons are carried together, he shall be entitled to an extra payment of 6d. for every person above two persons so carried. Provided that two children under the age of ten years shall count for one person, and that for any one such child, when carried together with two or more persons, the extra payment shall be 3d., and no more.

25. If a hackney-carriage is hired by distance, and in the course of the hiring is, at the request of the hirer, made to wait, the driver

shall be entitled to charge (in addition to what is due to him for distance) an extra payment as follows :

(1.) For each period of fifteen minutes completed, whether in one stoppage or in several stoppages—

	<i>s.</i>	<i>d.</i>
For a four-wheeled cab hired within the four-mile circle...	0	6
For a two-wheeled cab hired within, or for any cab hired without, the four-mile circle	0	8

The driver shall not be entitled to any extra payment for waiting any less period than fifteen minutes (whether such less period be completed in one stoppage or in several stoppages) which is over and above any number of completed periods of fifteen minutes.

The driver shall not be entitled to receive any extra payment for waiting, if such waiting has not amounted in the whole to fifteen minutes.

26. A driver, if hired by distance, shall not be compelled to drive more than six miles ; and, if hired by time, shall not be compelled to drive more than one hour.

27. A driver of a cab who, for any hiring, shall charge, or take more than the fare, shall be deemed to have committed a breach of this order.

28. The driver shall deliver to the hirer, on entering the cab, a ticket in the form specified.

If the driver neglect or refuse to deliver such ticket in manner aforesaid, he shall be deemed to have committed a breach of this order.

29. It shall not be lawful for any cab to ply for hire elsewhere than at some cab-stand or place appointed for that purpose.

Regulations as to Property accidentally left in Hackney and Stage-Carriages.

34. If any property found in a hackney or stage-carriage, and brought to any police-station by the driver, or by the driver or conductor thereof respectively, under the Statute 16 and 17 Vict., cap. 33, sec. 11, be not, within three months, claimed and proved to the satisfaction of the Commissioner to belong to the claimants, the Commissioner shall forthwith sell such property, and out of the proceeds shall award to such driver or conductor as follows :

For property consisting of, or comprising } gold or silver money, bank note, jewellery, or watch, and being of less value than £10.	} A sum equal to 3 <i>s.</i> in the £1 on the value of the property.
For property of any other kind, } and being of less value than £10.	
For property of the value of } £10 or upwards.	} A sum equal to 2 <i>s.</i> 6 <i>d.</i> in the £1 on the value of the property.
	} Such a sum as the said Commissioner shall deem reasonable.

Provided that the Commissioner may, if he think fit, at the

expiration of the said period of three months, deliver the property to such driver or conductor, instead of awarding to him a sum of money.

35. If the property which shall have been so brought to a police-station, be claimed before the expiration of the said period of three months, and the claimant prove to the satisfaction of the Commissioner that he is entitled thereto, the same shall be delivered to him on payment by him of all expenses incurred, and of a remuneration to the driver or conductor. The amount of such remuneration shall be determined by the Commissioner, with reference to the character and value of the property, in accordance with the foregoing section.

In Kelly's "Post Office Directory" of London will be found a list of crossing points, being the places where the four-mile circle, described from King Charles's statue at Charing Cross, as determined by the police authorities, intersects the several roads mentioned; these generally coincide with the same points as shown by the map prefixed to the Directory, but where any variations exist, this list may be taken as correct rather than the map.

The measurements have been very carefully made, and it is strange to remark what places form the outer limit of the four-mile circle. Sometimes a tree indicates the spot; at other times a letter-box let into a wall, sometimes a lamp-post, and frequently the front door or entrance to a house or shop. The fares for hackney-carriages in London and other large towns throughout England are very much the same. Even in country towns the fare is generally one shilling a mile, but if taken any distance outside the town, the driver generally expects something for himself. In some towns the fare exceeds a shilling a mile; but, in my opinion, it should not do so. In London when the fares were sixpence a mile, cabs were frequently taken a mile, upon the completion of which the cabman was paid sixpence; but, of course, this was utterly ridiculous, and no generous-minded person would have paid such a fare, and yet it was authorised by Government. Most Londoners are acquainted with Mrs. Prodgers, an old lady whose name used to figure in the Police

Court reports, and who was frequently summoning the poor cabbies because they would not submit to be paid sixpence for driving a mile with a stout old lady frequently accompanied by a heavy trunk.

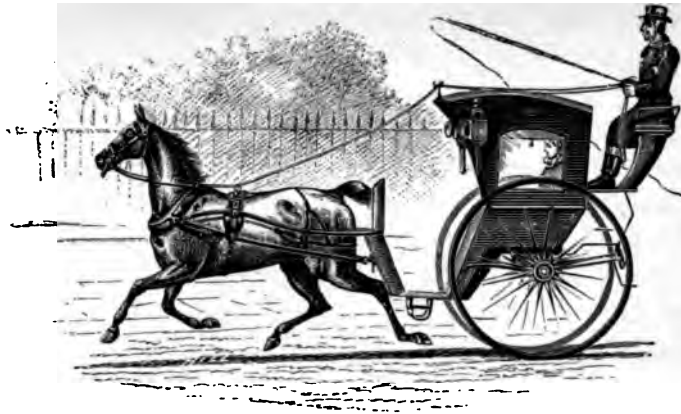
Had a cabman driven twenty miles a day at this rate of remuneration he could only have made ten shillings a day ; besides which, before the Act of 16 and 17 Vict., c. 127, cabs had to carry a moderate amount of luggage without extra payment.

A shilling a mile is a very fair charge, but sixpence a mile was insufficient. It must be remembered that cab proprietors have to keep, on an average, two horses to every cab, sometimes with smart hansoms even three, when they have to do a lot of night work. Well-appointed hansom cabs do not commence work very early in the morning, unless it be on unusual occasions ; they first appear in the streets when business men are hurrying citywards, or wherever their business happens to be situated, those who have to attend to business earlier in the day being generally clerks and people in a subordinate position who cannot afford to hire cabs.

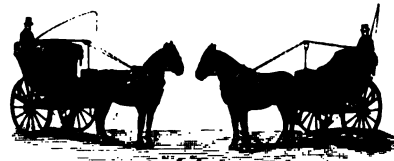
Nothing could be better than the present condition of some of the best hansom cabs in London, and nothing could be much worse than the condition of the London four-wheeler.* If we take one of the

* Four-wheeled cabs are frequently employed to remove fever patients from their homes to the hospitals ; and owing to this fact, and to their not being disinfected, but having their windows afterwards closed, they act as perfect traps for the conveyance of contagious diseases from one person to another ; and the fresh fares, being unconscious of the danger they run, can take no precautions against infection—besides which, the cabby himself may not be aware that he is conveying a fever patient. The penalty for engaging a public conveyance under such circumstances ought to be a very heavy one ; and this ought to be enforced by law. The hospitals should be forced to maintain vehicles for this purpose.

best hansoms, we will probably find it appointed as follows. To begin with the horse: between the shafts, you will observe, is a thoroughbred, drafted from some racing stable, not for any vice, but because he has not the requisite turn of speed; he has been sent up to Tattersall's or Aldridge's, and has been purchased by some cab proprietor. The horse is a nice-looking beast, with a neat-looking head and neck, good shoulders, and excellent limbs, and you probably remark that he is too good for a cab. He has on him a nice, light, well-made harness, the brass-work of which Mr. Cabby is continually polishing; the cabman himself is a smart-looking fellow, and apparently takes great pride in his horse and cab. The cab is built by Forder, the well-known coach-builder, of Upper St. Martin's Lane; the wheels have noiseless indiarubber tires, and in place of the old doors opening in the centre and falling back on either side, there is one large door like the apron of a carriage stretched out on a solid frame, which falls against the dash, leaving room for the fare to get in or out. As you enter the cab, the cabby, apparently conscious that you are wearing a good hat, lifts his reins out of the brass guide through which they pass, in order to avoid knocking it off. As you seat yourself inside the cab, you observe the india-rubber mat at your feet, the two little looking-glasses, the place for your cigar-ash, and the box of lucifer-matches; in addition to these luxuries there is sometimes a pneumatic or electric bell. In one cab in which I rode, there was actually an apparatus for signalling to the driver to stop, turn to the right or the left, and so on; in addition to this there is a little silk blind to each side window (the use of which I have never been able to understand); to this



A FORDER HANSOM.



CLOSED.

OPEN.

A VICTORIA HANSOM CAB BY MESSRS. MULLINER, COACH-BUILDERS,
OF NORTHAMPTON.



FLOYD'S PATENT HANSOM CAB.

[To face page 205.]

blind is frequently suspended an artificial flower similar to that which adorns the horse's head, just above his blinkers. If it be one of Lord Shrewsbury's cabs it will be marked S. & T. on the outside panel, and you will have the satisfaction of knowing that your cab-proprietor is Charles Henry Talbot, Earl of Shrewsbury, Earl Talbot of Hensol, County Glamorgan, Viscount Ingestre, County of Stafford, and Baron Talbot of Hensol in the Peerage of Great Britain, Earl of Waterford in that of Ireland, and hereditary Lord High Steward of Ireland.

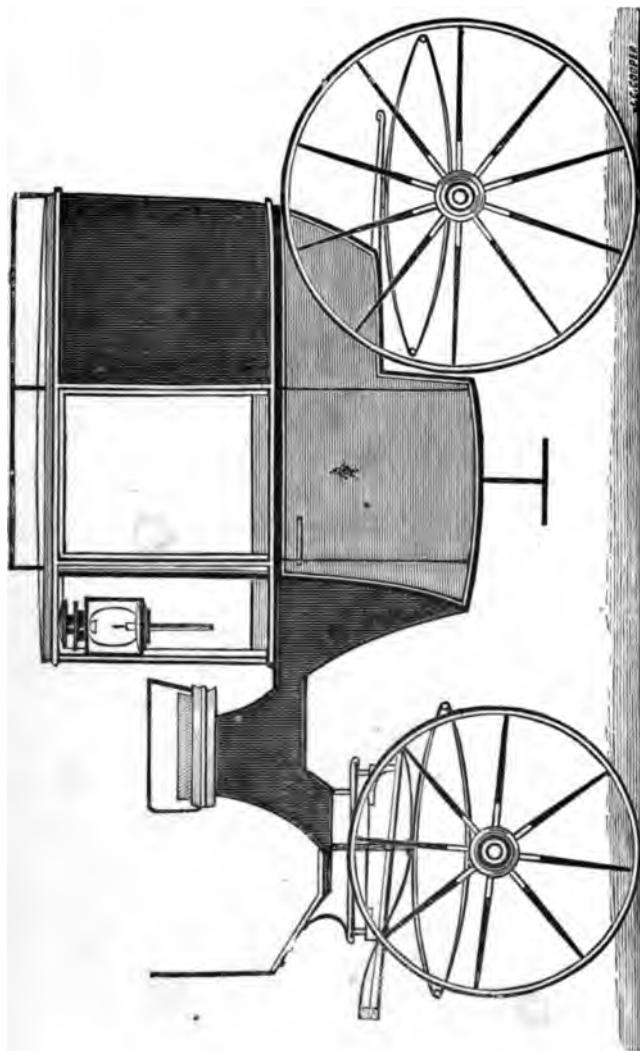
But all hansom cabs are not like this ; some of them are dirty and shabby, the horse an ill-bred and sluggish beast who probably stands over, having broken his knees. It is painful to be drawn by such an animal, as he has very little go in him, and to keep him up to his collar, the driver's heavy lash is frequently brought down heavily on his worn frame. To any one who loves horses nothing can be more distressing than this. One cannot help conjecturing the history of the poor animal, and what he must have been before he came to such a pass. Remonstrance does but very little good in these cases ; although the cabby may abstain from thrashing the horse whilst you are in the cab, in the belief that by desisting he may increase the amount of his fare, yet, immediately that your back is turned, you may be certain, if the man is so inclined, he will punish the poor animal more than ever in consequence of the short respite you have obtained for him, and this is still more likely to be the case if some one afterwards engages his cab to catch a train, who feels no sympathy with the sufferings of dumb animals. I have often seen cabmen, when walking their horses slowly along the street, although their cabs have been empty, thrashing their horses, in order, possibly, to observe

what effect the application of the lash will have upon them, and I have often felt inclined to pull them from their seats, and thrash them as they have been thrashing their horses. The only thing that has deterred me is, that my good intentions might probably be misunderstood, and that the cabman might excite in the minds of bystanders a sympathy which he did not deserve.

Of course the best time for hansom cabs is during the London season. A hansom is not a good wet-weather carriage, a four-wheeler is even preferable on a really wet day. With a hansom there is always some obstruction and inconvenience with the reins, the door, and the window, which even when it is let down allows the rain to splash through in one's face. For a lady on a wet day a hansom cab is a most inconvenient carriage; the muddy wheel, standing out obtrusively as it does, is destructive to gowns.

It is a matter for extreme regret that cab proprietors do not start some good station broughams. If half the care and money were expended on good broughams as is lavished on hansoms, we should have a far more useful class of hackney-carriage than we have now. Last season several victorias made their appearance in the London streets, and on the cab-stands; but these are essentially fine-weather carriages, and not suited to our uncertain climate. There was also a hansom cab which opened and closed, brought out last season, but this was an expensive and very complicated vehicle, which for general purposes could bear no comparison to a strongly-built, square-fronted station brougham.

Most of the cab-horses are bought by auction at Aldridge's Repository, Upper St. Martin's Lane; Tattersall's, Albert Gate; Rymill's, 56, Barbican; Ward's in the Edgware Road, or some other place where they are easily obtainable at a low price, the



A STATION BROUGHAM.

Such a carriage as this should supersede the old London Four-wheeler ; as a Station Brougham it is unrivalled both in town and country ; it carries four persons comfortably, besides a considerable quantity of luggage.

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usual price being about ten pounds a leg for a really good sound horse, whereas screws can be picked up at any price from five pounds and upwards. The price for a good cab-horse is about the same as what is paid by Government for cavalry remounts. Some of the London hansom cabmen are first-rate coachmen and understand cutting in and out amidst crowded traffic without colliding, and have a marvellous knack of keeping their horses on their feet on wood pavement, which continuous rain has made as slippery as ice.

It must be remembered that, when driving a hansom cab (and, as a youngster, I have, of a night, driven one myself about the London streets, which may be all very well for the fun of the thing, but must be very different when circumstances force one to adopt this humble calling as a profession), from your elevated seat, you can see nothing of your horse but his head, and very little of that, the wheels can scarcely be seen at all, consequently it is very difficult to judge what space you have to spare. Hansom cabmen, who are not proprietors but merely drivers, occasionally have much difficulty in making a profit; out of the season they pay about fifteen shillings a day to the cab proprietor, that is in the utterly dead time of year, but in the busy times they pay as much as twenty-five shillings; but I am informed that, as a rule, they pay seven shillings at mid-day when changing horses, and ten shillings more when they return to the stable of a night.

A correspondent to the *Pall Mall Gazette*, who drove a cab for one entire day in order to furnish his paper with some information respecting cabmen, states that, in addition to the sum I have named, the driver pays a fee of two shillings, called "yard-money," also a tip of threepence to the horse-keeper, who is, in fact,

the stableman ; and another threepence to the washer, who washes the cabs and horses. He goes on to state that many of the drivers when the winter arrives seek other occupations ; he says that most drivers make an income of about a hundred pounds a year, and to do this it is necessary to take over twenty-five shillings a day in summer, and not less than a pound in winter. This amateur cabman goes on to say that, in twelve hours he had eleven passengers, and took in all twenty-seven shillings. "One gentleman," he says, "engaged my cab near the House of Commons. He went about from place to place for nearly three hours, apparently collecting signatures ; he gave me half-a-sovereign, the proper fare was seven-and-six ; but I got the gold," he facetiously remarks, "by addressing him as 'your Excellency.'"

Four-wheel cabs might be much improved if the window-glass was fixed properly in the frames, and the frames themselves were covered with cloth, to render them noiseless ; in a four-wheel cab, when the windows are up, and it is being driven over stone or macadam, it is almost impossible to hear oneself speak ; conversation under such circumstances is an impossibility. There is still a very large field for improvement in London hackney-carriages ; but, as I have before remarked, good broughams and station cabs are what are required. I also think that cabmen might wear some distinctive sort of uniform, for however well a cab be turned out, the harmonious effect is entirely destroyed by the singular get-up of some of the London cabbies.

In my opinion, a man who is officiating as coachman of any vehicle that seeks patronage owing to its neat and smart appearance, should wear some kind of dress that is in character with his equipage ; the driver of a regular old growler is frequently a most alarming

sight, and on a pouring wet day there is nothing more pitiful than to observe the reluctance with which he quits his seat and divests himself of the seedy old horse-cloth that covers his knees, when called upon to open the cab-door, or ring a street bell.

There is one thing to be said in favour of four-wheel cabs. If the horse, by some extraordinary chance, should be a good one, they will carry a marvellous amount of luggage, and think nothing of trotting along with it as freely as though they were harnessed to a light cart ; to see the enormous trunks which are yearly brought to London by American ladies, and packed on to the roof of four-wheel cabs, is a sight that fills us with astonishment.

It must not be supposed that a hackney-carriage is a stage-carriage. Four-horse coaches are stage-carriages, so are omnibuses and tramways, so in fact are trains, since they run an allotted, defined, or pre-arranged distance.

A stage is a place of rest upon a public road or where a relay of horses is taken, the distance between two places upon a public road, a degree of advance or of progression.

A stage-carriage is a carriage for conveying goods and passengers, at stated times, a certain appointed distance. Omnibus is a Latin word, meaning "for all" being the dative case of *Omnis*, all. The carriage to which it has given a name, is a long-bodied, enclosed, four-wheeled vehicle, the seats being arranged along the sides ; this is the definition given to it by lexicographers.

The people who are constantly regretting stage-coaches should remember that in point of comfort they were not equal to a well-constructed omnibus. The idea of such a conveyance as an omnibus is ascribed to

Pascal, about 1662, when similar carriages were started but soon discontinued ; they were revived in Paris, about the 11th of April, 1828, and introduced into London by a coach proprietor, named Shillibeer. The first omnibus started from Paddington to the Bank of England, on Saturday, July the 4th, 1829. The omnibus is usually licensed to carry from ten to twelve passengers inside, and from ten to fourteen outside, and is attended by a conductor. Regulations were made respecting omnibuses by Act 16 and 17 Vict., c. 33, in the year 1853.

When the first omnibus ran from Paddington to the Bank, going in the morning and returning at night, it was not always full ; the fare was two shillings inside, and eighteenpence outside. An attempt was made, in the year 1800, to introduce, instead of coaches for long distances, a commodious kind of vehicle resembling an omnibus, but the project failed in consequence of the general prejudice against the hearse-like appearance of the carriage. The long-bodied carriage then tried was drawn by four horses and had six wheels. When introduced from Paris, the omnibus had four wheels but was much longer and heavier than at present, and was drawn by three horses abreast. One of the first successful omnibuses in London was started in 1829, to run between Greenwich and Charing Cross, at fares considerably less than those of the old short stage-coaches ; in addition to which advantage, the greater part of the passengers were sheltered from the weather. Success in the first experiment led Shillibeer to establish omnibuses between Paddington and the Bank, as I have before mentioned.

After opposing the innovation most violently for a time, the old coach proprietors followed his example,

started omnibuses of their own, and by combined opposition succeeded in driving him entirely off the road ; not, however, before the new system of travelling was fully established.

The word "omnibus" was for some time not recognised by the Legislature. The conduct of the stage-carriages which are employed in London, and within ten miles of the General Post Office, was further regulated by an Act passed in 1838, in which they are directed to be called "Metropolitan Stage-carriages," and by which, besides the rules applicable by previous Acts to these conveyances as stage-carriages, other enactments were made as to the Stamp-office plates, etc. It also empowered the Secretary of State to appoint a Registrar of Metropolitan Stage-carriages, whose duty it was to issue the license which the Commissioners of Stamps are authorised to grant to drivers and conductors. These licenses the Registrar may grant to any person above sixteen years of age, who can produce certificates of his ability to drive, and of good character ; and are subject to much the same restrictions as applies to hackney-coach drivers.

Another regulative Act was passed in 1843. Omnibus proprietors were as before to fix their own fares ; but the list of fares was to be painted inside the omnibus. A further Act passed in 1855 contained two or three further clauses ; the mileage duty was reduced from one penny halfpenny to a penny a mile, etc. In 1836 a joint-stock association, called the "London Conveyance Company," was established ; which proposed to run omnibuses along the principal lines of traffic, starting at short and regular intervals, and conducted by men of sober and respectable character. The result of this experiment was so successful that other

owners formed themselves into bodies of similar character. In the course of a few years the association system was almost universally adopted in the metropolis. For some years the traffic from Paddington to the Bank through Holborn was managed by the London Conveyance Company, with more than eighty omnibuses, and not less than a thousand horses. Each of the omnibuses performed upon an average six double journeys per day, and required at least ten horses to work it, independent of casualties. These horses were selected for strength and activity, and an experienced veterinary surgeon, with a staff of assistants and farriers, was employed to attend to them. The annual receipts of this company alone were roughly estimated at £80,000 to £100,000.

About the year 1844, it was found that, out of 1400 metropolitan omnibuses, 200 were engaged on various routes to Paddington. In 1855, a "London General Omnibus Company" was established. It was of French origin, as a *Société en Commandite*, but was afterwards transformed into an English company with limited liability. A capital was raised by shares; and the company proceeded, not to establish new omnibuses and omnibus routes, but to purchase those already existing. The sets of omnibuses known as the "Wellington," "Atlas," "Waterloo," "Favourite," etc., were one by one bought up. On an average the company purchased eleven horses with each omnibus. In order to propitiate the public, the company promised new and superior vehicles. They offered a prize of £100 for a design for an improved omnibus; but though the prize was awarded, the company have not adopted that or any other particular model in the build of their omnibuses. The operations

gradually extended until the company became possessed of more than 600 omnibuses; each omnibus with its stud of horses, harness, and "goodwill" of the business already established, cost on an average about £700. The horses exceed 6000 in number.

It has been found that these metropolitan omnibuses, one with another, run more than 20,000 miles a year each. In renewing the stock the average expenditure has been about £120 per omnibus, £30 per horse, and £12 harness. Each horse, under average prices, costs 26s. per week for food, litter, medicine, shoeing, attendance, etc. The "wear and tear" of omnibus and harness per week is about 24s. The horses run about twelve miles per day each, on an average.

The transactions of this company during the year 1860, present a strange result in a financial point of view: 40,000,000 passengers had been conveyed, and had paid about £589,000 to the company for that service; but the expense incurred in rendering the service was £591,000, showing a small but actual loss on the whole year's operations, and leaving no dividend whatever for the invested capital. The receipts show an average of about $3\frac{1}{2}d.$ per passenger.

The omnibuses in Glasgow, Liverpool, Manchester, and several other towns, are in most respects superior to those of London. The mileage duty paid to the Government for the metropolitan omnibuses amounts to about £70,000 a year, to which is added about £15,000 a year for stamp duty, and drivers' and conductors' licenses.

Much of the information given above was derived from the "English Encyclopædia."

The "Encyclopædia Britannica," in its article on London, speaking of street communication, states that

in 1857 there were in London 4312 hackney-cabs and 1019 omnibuses for the conveyance of persons from one part of the metropolis to another. The extent to which omnibuses are patronised may be estimated from the weekly traffic receipts of the General Omnibus Company, which amounted, in the week ending the 7th of March, 1857, to £10,818 15s.

In New York there are thirty lines of omnibuses, there being 600 of these conveyances in daily use; the routes of these lines vary in length from three to five miles, the uniform fare is threepence. The number of hackney-cabs is not in proportion to the population of the City, owing mainly to the greater facilities afforded by more popular conveyances, and somewhat to the extortionate demands of cabmen, though their rates are duly prescribed by law.

The omnibus was introduced into Amsterdam in 1839, and since then its use has been extended to all large cities and towns in the civilised world.

Tramways are an abbreviation of Outram roads; this seems a rather far-fetched derivation, but it is the fact. Mr. Benjamin Outram, in the year 1800, made improvements in the system of railways for common vehicles. One of the first tramways ran from Croydon to Wandsworth; this was completed on July 24th, 1801. Mr. Outram was the father of the late Sir James Outram, the famous general officer of the Indian Mutiny.

Since Outram's time an immense number of tramways have been established, more especially in the United States; in New York, and other large towns of America, they are in frequent use. The improved form of tram-car, when introduced into England, was first made use of in Liverpool and Birkenhead. The

first street tramway was opened at Birkenhead, in Cheshire, on August 30th, 1860. At Birkenhead a large number used to be constructed, and were sent to various other towns. An immense number of large straggling towns, where the population is dispersed, now make use of tramways, which, although they injure carriages that cross their line of route, owing to the defective way in which the rails are frequently laid, are yet a great boon to the poorer class of the inhabitants. As far as regards London, tramways have not been altogether successful.

I very well recollect tramway-rails being laid in the Bayswater Road, but there was such an outcry from the residents in the neighbourhood, that the line had to be taken up. As regards London, tramways, it appears, only answer in a comparatively poor neighbourhood; this is easily understood, as the people in the wealthier districts mostly have their own carriages or ride in cabs, and even were a tramway to pass by their doors, might not feel disposed to make use of it.

Tram-cars are most destructive to horses, on this account: when once the car is set in motion, like rolling stock on a railway, that motion can easily be continued, but it is the first effort to set the wheels revolving that tries the back-sinews and fetlock-joints of horses. Many expedients have been resorted to in order to start the cars by mechanical power stored up for the occasion, but I am not aware that they have been successful. Mules have been employed to supersede horses, a number of which may be seen working the tram-cars in the Westminster Bridge and Brixton Roads; but why they answer better than horses for such work, I am at a loss to understand,

except it be they are cheaper to buy and cheaper to keep.

About ten years ago I saw a steam tramway at Rouen, in France; since then a great number of steam tramways have been established, as may be remarked by observing the long list of tramway companies in Kelly's "London Post Office Directory." There was a steam tramway on Ryde Pier in the Isle of Wight; but this has been done away with, and an electric tramway established in its place. The electricity is generated by an Otto gas-engine stationed at one end of the pier. An electric tramway was established by the Siemens firm, and ran between the Palais de l'Industrie and the Place de la Concorde, in Paris. An electric tramway was supplied by Siemens and Halske at the Berlin Exhibition, during the summer of 1879, and was such a success that it was repeated at Brussels, Düsseldorf, and Frankfort; in the last-mentioned town it ran from the exhibition to the railway station. On the 12th of May, 1881, an electric tramway was inaugurated near Berlin, under the superintendence of the same firm.

I must apologise for this digression. I merely mention steam and electric tramways, to show what advance has been made in stage-carriages, proving that we must be prepared, at no distant date, to see horses superseded by other motive-power so far as regards conveyance by stage-carriage.

CHAPTER V.

POSTAL TRANSMISSION—POST-CHAISES AND POST-BOYS.

Early letter-carriers and postal systems—The first English Post—Further postal organisation—The Penny Post—Post-chaises and post-boys—Postillions—Post-horses—Post-houses, post-masters, and post-boys—Two good Conservatives—Rules of posting-yard.

BEFORE speaking about post-chaises and post-boys it would be as well to speak not only of the origin of the word post but of the actual transmission of letters by road, since coaches and horses have been largely employed on the road in the transmission of letters and the conveyance of travellers. Although the word post should perhaps be confined to the transmission of letters only, it has somehow extended itself and obtained a wider signification, since it gave a name to a carriage and to the men employed to ride the horses that drew it.

It is difficult to trace the origin of the word post as applied to travelling. It is defined by some lexicographer as being the means by which letters or travellers are transported with rapidity and ease from place to place; the name is supposed to be derived from the Latin *positus*, placed, because horses were placed at certain distances on the routes. Posts seem to have had their origin amongst the Persians. Darius, the first son of Hystaspes, caused couriers, with saddle-horses, to be always ready at different stations throughout the empire at a distance of one day's journey from

each other, in order that there might be no delay in getting reports from the provinces.

During the Empire an institution similar to the modern post was established by Augustus among the Romans.

In Germany, France, and Italy, during the ninth century, there existed messengers who travelled on horseback; they were, however, only employed for the Government. The use of carrier pigeons, introduced from the East, had only a short duration in Europe. With the progress of commerce, however, the necessity for having posts made itself felt, and in all the largest cities of Germany mounted messengers and stage-coaches began to be established; letters were also placed in the charge of travellers, merchants, and butchers, who rode about the country to buy cattle.

Pedestrian messengers who took charge of letters and money for the students were maintained by the University of Paris in the beginning of the thirteenth century. In the fifteenth century Louis XI. established for his own use mounted messengers, and instituted post stations at intervals of four French miles on the principal roads of France. During the next century Charles VIII. extended this institution for the use of the court.

The first post was established in Germany by Roger I., in the latter part of the fifteenth century.

In 1516 another was established by his son between Brussels and Vienna. Charles V., on account of the vastness of his estates, desired to have news as quickly as possible, and caused a permanent riding-post to be established from the Netherlands through Liége, Trèves, Wurtemberg, Augsburg, and the Tyrol to Italy.

After the death of Charles V., Leonard of Thurn

and Taxis, who had established the post, was appointed Postmaster-General to the Empire. As long as the Empire existed this postal system lasted.

Austria and Prussia in 1850 formed an international post compact, in which, after a time, Bavaria, Saxony, and various other States joined. At first the stage-coaches were united with the post-offices; but this arrangement was, in that country as well as in others, greatly altered and modified by the introduction of railways. In France, shortly after the beginning of the seventeenth century, the system of posts began to receive more regular attention, a Controller-General of Posts being appointed. The post was then farmed out to private speculators till the expiration of the last lease, and the establishment reverted to the King at a time when it produced an income of more than 11,000,000 francs. Until the Revolution, which took away all such privileges, the Post-Masters enjoyed great immunities. The present rates in France, as regards letters, were established by the decree in 1854.

The Russian internal postage fees are very moderate, notwithstanding the difficulty of travelling, owing to the severity of the climate and want of good roads; the charge for each letter in that large Empire amounts to no more than ten copecks, about twopence-halfpenny.

In Denmark the post is on the German model, and managed very much with a view to revenue, and the same is the case in Sweden. In Norway there is an independent post carried on especially by steamboats, which visit the whole coast. In the Netherlands the English system of post seems to be followed, and in Holland the French.

Posts were first established in the English colonies in North America in 1639. The celebrated Benjamin Franklin was appointed Postmaster-General to the American colonies in 1753; he remained in that position till 1774, when the British Government very foolishly dismissed him.* Many improvements were introduced during his superintendence. The postal charge in America upon ordinary local letters is one cent, which is one halfpenny; upon letters not exceeding half-an-ounce in weight, addressed to any distance within three thousand miles, three cents, equal to three-halfpence; and when sent upwards of that distance ten cents, fivepence; and all letters have to be prepaid.

The English postal system commenced in the reign of Edward III., but it was not exactly a public institution. In Edward IV.'s reign post-houses were placed at intervals of twenty miles along the main roads; and, in the north, a military post was established to communicate with the army during the invasion of Scotland. It is uncertain at what period the public were permitted to make use of this institution. Before the reign of Charles I., merchants, tradesmen, and professional men resorted to less secure methods of conveying their letters, or employed express messengers at great expense. It must have been in these days that the word "express" originated, used in connection with particular haste and speed. Lexicographers define it, when taken in this sense, as a messenger or vehicle sent with haste on a particular errand; any vehicle sent with a special message.

* This made him very hostile towards England, although America was merely the country of his adoption, he being an emigrant. After the Declaration of Independence he became a naturalised subject of the United States, but the bent of his inclinations may have been decided by his dismissal from Government employment.

Of late years a railway-train, which travels at a high rate of speed, has been called an express ; but it evidently originated in the early days of posting, and in America and other parts of the world where public vehicles act as regular stage-coaches on common roads, or where horsemen are employed to transmit the mails, the word express is frequently used. In the principal cities and universities there were messengers who performed long journeys on horseback or on foot, and returned with answers to letters.

With the assistance of Matthew Le Quester, James I. established a system of forwarding letters to foreign countries ; before that time this had been done by private enterprise. In 1632 Charles I. by a proclamation forbade letters being sent out of the kingdom except through the post-office, and three years afterwards he established a system of post for England and Scotland, which was carefully and judiciously regulated. This was followed by the abolition of all local and private posts, and the income of the post-offices was claimed by the King. The newly-established post was placed under the control of Thomas Witherings. About the same time Charles, in connection with Louis XIII. of France, established an international post between London and Paris, while the private post, which had hitherto existed between Rye and Dieppe, was abolished. During the period of the civil wars these institutions suffered severely, but they recovered when peace and tranquillity was restored. A member of the House of Commons, named Edmund Prideaux, suggested alterations in the postal system, one of which was a weekly conveyance of letters to all parts of the kingdom, whereby the public were saved £7000 per annum. The greatest advance, however, was made in the postal

system in the year 1656, when an Act of Parliament was passed which dealt with the postage of England, Scotland, and Ireland. This Act stipulated that there should be one General Post Office in London, and one Postmaster-General, having authority over the entire system ; this Act was confirmed at the Restoration, but repealed in Queen Anne's reign.

A London penny post was started in 1683, and between 1711 and 1838 more than one hundred and fifty Acts were passed affecting the regulations of the Post Office ; but for the great radical change which took place in our postal system we are indebted to Sir Rowland Hill ; it was he who substituted the penny postage for the old system and charges hitherto in vogue. At the time this was done great fear was manifested by the Government that, by lessening the charge of postage, they would lower the receipts of the Post Office ; but this, as every one knows, has not proved to be the case. But as the penny postage did not come into effect until 1840, which was after the time of the establishment of railways, and the removal of the mails from the road, I may be excused for not describing its various advantages and its remarkable results.

I am indebted to an early edition of Beeton's "Dictionary of Science, Art, and Literature," for some of the history of the postal system ; and, although this may appear somewhat of a digression from what has to do with the roads, yet up to this point in the history of postal transmission all letters were carried by the road, and consequently mail-coaches, mail-carts and letter-carriers of all descriptions were a striking feature on the highway. Moreover, post-chaises and post-boys, as I have said, owed their name in some way to the establishment of the postal system. Post is thus used

adverbially for swiftly, expeditiously. To travel with post-horses means to travel with speed ; to ride post is to be employed to carry despatches, and as such carriers rode in haste, the phrase " Post " signifies to ride in haste, to pass with expedition.

Posting means, travelling by means of horses hired at different stations on the line of journey ; postillion is derived from the French, and post-boy has always been the more usual term used when speaking of the men employed to ride hired post-horses in England. A post-chaise is a carriage for conveying travellers from one station to another ; the term post-haste, has been derived from travelling with speed. Posting-houses, are houses where relays of horses are kept for the convenience of travellers.

Before the days of railroads, there were six ways by which persons could be conveyed on the high-road : they could travel by mail-coach, by stage-coach, travel with their own carriages and horses, or with their own carriage and post-horses, or ride on horse-back, or, if poor and of the lower class, they could journey by the slow stage-waggon. As regards the regular post-chaise and the private travelling-carriages then in use, they were very similar to the carriage which the present generation knows as a chariot, but without the coach-box and the huge hammer-cloth ; in fact, it was like a large single brougham hung on very high C springs, with a dash-board before the front window where, in a chariot, the coach-box would have been situated.

Why the term " jolly " should ever have been applied to a post-boy, it is difficult to say. In my opinion a post-boy's life must have been a very trying one ; the very fact of being wedged in between a

hard ash pole and a horse's side, holding in your hands the reins, not of one horse, but of two, must have been exceedingly trying and anything but jolly ; besides which, when the roads were dusty, the dust kicked up by the horses' heels must have been more than sufficient to suffocate any properly-constituted human being, whose larynx was of mere ordinary capacity. Perhaps at the end of his journey, under the reviving influence of capacious draughts of ale, the features of these old boys might have relaxed sufficiently to entitle them to their youthful appellation, they might have been induced to kick their heels in the merry dance, or in some tap-room lift in song the boyish voices that had grown discordant with dust, beer, and age. Whilst in wet weather they must have looked like drowned rats, the only protection afforded them against pouring rain being short capes just covering their shoulders, but leaving their knees, thighs, and arms exposed to the full force of the elements.

These are mere idle conjectures ; sufficient to say the term "jolly post-boy" is one for which the past, and not the present, generation is responsible. The idea of any full-grown man being called a boy, is sufficiently ridiculous of itself without going still further and taking it for granted that, in addition to this, he possessed convivial and festive qualities of so high an order that they caused him to be described as jolly.

The custom of riding postillion has always appeared to me wrong from a humanitarian point of view ; a horse that is employed in draught has enough to do without, in addition to this, being made to carry a weight, which is in itself sufficient to tax his powers of endurance. When going downhill a wheel-horse has quite enough to do in keeping a carriage back

without being made to support the additional burden of a man's weight. Another thing against mounting a postillion on a wheel-horse is this : although the horse he rides may be held fairly well, and an equal tension be made to bear on either rein, yet, in the case of the horse he is leading, it is very different ; the animal's head is pulled aside continuously, which prevents his seeing where he is going and renders his progress a matter of some danger. At the present day, postillions are used very rarely ; post-boys not at all, since the system of posting has entirely ceased throughout the United Kingdom. Postillions are employed to ride horses attached to carriages when going to race meetings, and occasionally at weddings, but there is no advantage in it, and it is merely done for the sake of display.

The Queen is very fond of employing postillions, and, in her case, there is this advantage : as she takes long country drives, a coachman and footman on the box-seat would obstruct the view ; besides which, it would be out of character were four horses driven in a landau, and were there only two it would not be an arrangement appropriate or befitting the style in which the Queen of England should be seen driving on the public roads.

In the coaching days posting was of equal importance with the more public modes of travelling. A prince of the blood royal, or a duke, bound on a journey, would post with four horses, so would all ladies of rank, if they could afford to do so ; the lady's-maid and footman sitting in the rumble. On these occasions they used their own carriages ; but if they possessed none of their own, they could always hire. People who posted were apt to think themselves far

superior to the ordinary coach-travellers, and, in fact, post-masters seemed to have a regard for them in exact proportion to their own estimate of themselves. There were posting-houses and coach offices, the former sometimes described as hotels, the latter as inns. Mr. Harris remarks that the coaches never stopped at the posting-houses unless they combined the two businesses of coaching office and posting-house. At the "Red Lion" and the "Green Man," at Barnet, were two notable posting-houses on the second stage out of London; no coaches stopped at these, they kept post-horses only; so at the "Verulam Arms," St. Albans, the "Salisbury Arms," at Hatfield, the "Rose and Crown," at Hounslow, the "Sugar Loaf," at Dunstable, the "White Hart," at Reigate; but the two most celebrated posting-houses were at Barnet—the "Red Lion," at the top of the hill, at the London end of the town, and the "Green Man," at the other end. Eighteen pairs of post-horses were kept at the "Red Lion" and eight post-boys, and twenty-six pairs at the "Green Man" and about eleven post-boys, and there were in the yards what the post-boys called "cads," who looked after the post-horses, washed the chaises, called up the post-boys when wanted of a night, and lighted, and assisted them to change horses. The "cads" in cases of emergency had to ride post, unless they happened to meet a post-boy returning with his pair of horses, when they exchanged places, the post-boy finishing the stage, whilst the "cad" took his horses back to the stables.*

* It is evident from this that in those days the word "cad" had a different signification from that which it has at the present day; it was not then a word of abuse, as it has since become. It is

For the services of the "cads," the post-boys themselves had to pay about four shillings a week.

The same writer goes on to say that the post-boys at the "Red Lion," at Barnet, rode in yellow jackets and black hats, and the post-boys at the "Green Man" in blue jackets and white hats. Passengers who had been left behind by the coach frequently posted after it, hoping to catch it up before it arrived at the next change.

In those days post-horses were kept ready saddled and harnessed day and night.

On one occasion seventy-five pairs changed within twenty-four hours at the "Green Man," at Barnet; but twenty-five pairs a day was considered about the average of changes.

Post-boys would frequently ride fifty miles a day.

Post-masters had to pay a tax of five guineas on every post-chaise.

When persons travelled a distance of seventy miles or more the post-chaise, as well as the post-boy, was changed at every inn; this caused considerable confusion, delay, and inconvenience, as it necessitated removing the luggage and all the paraphernalia of the traveller from the one chaise to the other; all the heavy trunks being securely strapped on to a large flat board over the axle of the front wheels.

At the posting-houses four horses were allotted to each post-boy; consequently, by the number of post-boys at an inn, one could obtain a fair estimate of the number of post-horses there were in the stable.

The post-boy frequently on his return journey, believed to be a corruption of the word "cadger," which means a beggar, one who would rather live on other people than work for himself. Dr. Johnson uses the word, and gives "huckster" as the meaning.

when the post-chaise was empty, rode on a bar placed between the two front C springs, from where he drove the horses ; his feet rested on the board used for supporting the travellers' luggage.

A writer says that there were two gentlemen, Colonel Sibthorp and Sir John Sebright, who, even when railways were established, never would travel in a railway carriage, but continued to post along the road until the day of their death.

Post-horse proprietors lost considerably by the introduction of the railroad, but not, perhaps, so much as coach proprietors, as the post-chaises were still of some use for short journeys or for private use ; but the large number of coaches that existed were of no use, except for firewood, as it is not every one who is disposed to drive four horses merely for amusement, even if they can afford to do so.

Mr. Harris gives the rules and regulations that were in force in the stable-yard of a large posting establishment. They were as follows :

RULES AND REGULATIONS OF THIS YARD.

1. Every man shall conduct himself properly. No swearing or quarrelling allowed.
2. That no one shall have a naked candle in his stable, sconces being provided.
3. That each shall be answerable for his own windows, and when he leaves his situation to pay all breakages.
4. That no one shall encourage strangers on the premises.
5. That when straw or corn comes in each shall

immediately attend, take his own proper quantity, and assist with the remainder into the loft.

6. That each shall as quick as possible get the manure from the stable door to the mine, and have his doorway swept clean by ten o'clock every morning.

7. That the sweeper shall have the yard clean by half-past ten o'clock every morning, and that he keep it so throughout the day.

8. That each shall wheel, or throw the manure as far as possible to the back of the mine.

9. That the first and second turn post-boys shall be always booted and spurred, with their horses ready harnessed, from eight o'clock in the morning until seven o'clock at night.

10. That the chaise-washer shall see that no carriage remains in the open yard all night, whether belonging to his employer or to any other post-master on this road.

11. That no post-boy or person engaged in this establishment shall be allowed, under any circumstances, to wash his horses.

12. That in case of any accident occurring to chaises or horses, the man meeting with such accident shall as soon as possible make the same known to his employers.

13. That every servant in this yard shall at all times, at his own expense, be provided with such tools, etc., as are necessary to fulfil the duties of his situation.

14. That no one shall enter the service of this yard without first giving their assurance that they will comply with these rules and regulations, and by so doing they shall at all times find their employers ready to make their situations comfortable, and promoting their different stations as an opportunity may occur.

A fine of sixpence shall be paid for every neglect of the above regulations into the hands of the head ostler, which money shall be appropriated towards assisting indigent and sick servants of this yard who may be unable to work.

A place for everything, and everything in its place.
Waste not, want not.

CHAPTER VI.

ROAD LOCOMOTIVES.

Colonel Maceroni's steam carriages—Mr. Gurney spends £100,000—Sir Isaac Newton's steam carriage—Reactionary propulsion—Trevithick's and Griffith's steam carriages—Thirty-two to thirty-five miles an hour—The "Era" runs eighteen miles an hour—Steam carriages in and about London—Report of committee of the House of Commons—Eighty-four miles in nine hours and twenty minutes—Opposition to steam carriages—Restrictive acts relating to road locomotives—Discouragement to road locomotion—Electric carriages.

ABOUT the time that railroads became established, a very strong opinion existed amongst scientific men that locomotives could be made available on the high-roads, then gradually becoming deserted. This idea was put into practice first by a Mr. Gurney, who spent £22,000 in experiments relating to travelling by steam on common roads.

Besides this gentleman, there was a Colonel Maceroni, who accomplished several long journeys at the rate of twenty-four miles an hour. His steam carriages weighed about six tons, and a writer on the subject says that they were under perfect control, and that he was in the habit of running in and out of London with them; and that one of his locomotive carriages was regularly worked between Paddington and the Bank of England, along New Road, but withdrawn after a time, as it did not pay in

consequence of its having to stop so frequently on its way. The same writer goes on to say that the great difficulty was want of capital. Most of the inventors and advocates of road locomotion were poor men, although a few capitalists spent considerable sums of money in perfecting their ideas; for instance, Mr. Gurney spent £100,000, and Mr. Ogle £60,000.

Colonel Maceroni performed some good journeys on the road; for instance, he ran his locomotive for eighteen months from London to Harrow, and also to Edgware, mounting Harrow Hill, which is said to be one of the steepest hills between London and York, besides being of soft yielding material; and yet Colonel Maceroni's engine went up it at the rate of eight miles an hour, which is far faster than any horses could have travelled up such a steep ascent. He frequently travelled from Regent Circus to Watford, and went four times a day up and down Oxford Street. A steam carriage also ran from London to Hastings.

Locomotive carriages, it was said, were perfectly safe on the common road. However safe they may have been, in my opinion there must have been one serious drawback to the use of steam-engines on the road; they must have caused driving and riding on the road to be attended with great danger, as there are few horses now that will meet a traction engine without being seriously alarmed. I see no reason to suppose that the horses in those days were more courageous or less susceptible to fright. It is said that these engines did not frighten horses when working in London; but I cannot understand this. Had the boiler had a good head of steam, it would

have been impossible to shut it off completely when it was desired to do so; and had there been any escape, it must have frightened horses, particularly as a London street is not like a country road, where they could turn off the steam until a horse had passed. There could have been scarcely a moment during the day when the street was without horses of some kind, all liable to be frightened by coming in contact with a machine of this description; otherwise there is much to be said in favour of road locomotion, and I have no doubt, in the present greatly improved condition of the steam-engine, a very light and simple locomotive could be built at the present time capable of travelling at a great pace and with perfect safety; but possibly it would be necessary to banish horses from the road were steam carriages introduced on highways and byways as a regular mode of conveyance.

Another writer gives the following particulars. He says that Sir Isaac Newton, in 1680, was the first person to design a steam carriage for road travelling. This vehicle was of the most primitive and elementary kind; in fact, toys have been manufactured recently, working on the same principle. It consisted of a globular boiler, under which there was a fire; there was an outlet to this boiler, terminating in a long tube in an opposite direction to which the carriage was travelling; this permitted an escape of steam, which rushed forth in volume immediately the water boiled, and by the reactionary force of the external air against which it was impelled forced the carriage along.

It is upon the same principle that the hydraulic steamships were propelled. There are several steam floating fire-engines on the Thames, which have

neither screw propeller nor paddle, but are driven by water discharged from both their port and starboard quarters. The *Water Witch*, an armour-plated ship of war, built at the Thames Iron Works, was constructed on the same principle. She was built from the design of Admiral Sir George Elliott, but was not found a success. Nevertheless, she had one good point, there was no propeller which could be injured by the enemy's shot.

I will return to the question of road locomotives. There were an immense number of steam carriages constructed at different times. A man named Nathan Read built one in 1790, for which he obtained a patent.

It consisted of two horizontal cylinders, with the pistons terminating in a ratchet arrangement, which worked on a toothed wheel through which the foremost axle passed, by which means the carriage was propelled. Another steam carriage was made by a French officer, named Nicholas Cugnot, who constructed his carriage in 1769. In 1770, he made a second steam carriage, which is still to be seen in the Conservatoire des Arts et Métiers, Paris. In this machine the cylinders are upright. After this there is no record of a road steam carriage until Murdock, the partner of James Watt, constructed a model one. This model ran six to eight miles an hour, its driving wheels making from 200 to 275 revolutions per minute; it was fitted with an American grasshopper engine.

After this, Oliver Evans, a native of the United States, constructed a road carriage, which he christened the "Oruker Amphibolis;" it was built in the year 1804. In September of the same year he made a statement to the Lancaster Turnpike Company, as

to the expenses of working a steam waggon that would carry one hundred barrels of flour fifty miles in twenty-four hours.

Richard Trevithick, in 1802, made a steam carriage for use on the common roads. He was a pupil of Murdock, who was partner to James Watt. Trevithick's engine is still to be seen in the Patent Museum, at South Kensington. This was a high-pressure boiler, and consequently no weighty condenser had to be carried.

In 1821, Julius Griffith, of Brompton, London, patented a road locomotive, to carry passengers; this was built by the inventor of the celebrated Bramah lock. The boiler in this engine did not prove large enough for continuous work. After this came the Gurney locomotive, spoken of before. Gurney's carriage was like a large four-horse coach, and carried several passengers; it was built in 1828, and was remarkably well constructed. There were many others built about this time, but it would occupy too much space to describe them here. Then there were Hancock's steam carriages, of which he had quite half-a-dozen. In 1831, Hancock placed his first steam carriage on the road between London and Stratford, where it ran regularly for hire.

A Sir Charles Dance, the same year, started another steam carriage between Cheltenham and Gloucester, where, a writer on the subject says, it ran from February 21st to June 22nd, travelling three thousand five hundred miles, and carrying three thousand passengers; running the nine miles in fifty-five minutes, and sometimes in three-quarters of an hour; and that, during the whole time, it never met with a single accident except once, when it ran over a heap

of stones placed in the road purposely by some enemies of the new system, upon which occasion it broke an axle; but of course this was not attributable to any fault of its construction or working.

Messrs. Ogle and Summers ran a steam carriage which attained a speed of from thirty-two to thirty-five miles. Ogle made a statement to this effect before a Committee of the House of Commons: "It ran on the Southampton main-road, and on a rising gradient near Southampton it went twenty-four and a half miles an hour." This was probably from the town up what is called the Avenue, across the common, and so on to Basset; they carried two hundred and fifty pounds of steam, ran eight hundred miles, and never met with an accident.

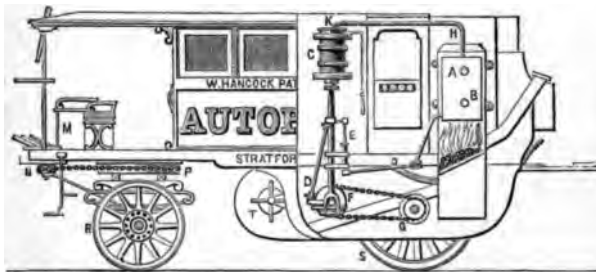
Thurston tells us that Colonel Maceroni, in 1833, ran a steam carriage of his own design from London to Windsor and back with eleven passengers, a distance of twenty-three and a half miles, in two hours.

Sir Charles Dance ran his carriage sixteen miles an hour, and made long excursions into the country at the rate of nine miles an hour. Another enthusiast constructed a road locomotive with which he ascended Lickley Hill, between Worcester and Birmingham, up a very steep gradient; this road is said to be one of the worst in England, and yet this engine towed a coach up it containing twenty passengers.

Hancock, after this, built a carriage propelled by steam, which he christened the "Infant;" it commenced work in 1831. Another, called the "Era," was built for the London and Greenwich Steam Carriage Company; this was mechanically a success. In October, the "Infant" ran to Brighton from



GURNEY'S STEAM CARRIAGE.



HANCOCK'S "AUTOPSY," 1833.

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London, carrying eleven passengers, at the rate of nine miles an hour, ascending Redhill at a speed of five miles per hour. Thurston says that they steamed thirty-eight miles the first day, stopping at Hazledean, and reaching Brighton the following morning. During the second day they ran eleven miles an hour. They returned with fifteen passengers; the coach ran one mile on its return in four minutes, and went ten miles of the journey in fifty-five minutes. A run from Stratford to Brighton was afterwards made in less than ten hours, at an average speed of ten miles an hour; the actual time under steam was only six hours.

Hancock had another steam carriage which he ran to Brighton, called the "Autopsy." After running to Brighton, it went about the London streets without meeting with any accident. It was something like an omnibus, the steam-engine and boiler being in the foremost part of the carriage.

These coaches ran until the end of November, 1834, carrying four thousand passengers, at the rate of twelve miles an hour. The "Era" once ran eighteen miles an hour.

In 1835 Hancock built a large carriage called the "Erin," which carried twenty passengers. It also towed three omnibuses and a stage-coach containing fifty passengers through Whitehall, Charing Cross, and Regent Street, and on to Brentford, running at the rate of fourteen miles an hour; it also ran to Reading, going thirty-eight miles in three hours and eight minutes. The same carriage ran to Marlborough, seventy-five miles, in seven hours and a half, stopping four hours and a half on the road. This delay was in consequence of certain stores having

been left behind which were positively necessary to the journey.

Hancock put all his carriages on the Paddington Road in 1836, and ran regularly for five months, running four thousand two hundred miles. He built a light steam phaeton for his own use, which ran about twenty miles an hour. This he drove about the City of London, amongst horses and carriages, without causing annoyance or danger. The usual speed was about ten miles an hour. Altogether, Hancock built nine steam carriages, capable of conveying one hundred and sixteen passengers, besides engineers and stokers.

In December, 1833, about twenty steam carriages were running in and about London ; but hostile legislation and the bad condition of the roads discouraged inventors and those who owned them, and even Hancock, the most indefatigable of them all, threw his up in despair.

And yet a Committee of the House of Commons, who were desired to report upon the matter, gave a very satisfactory account of the working of road locomotives, and expressed a conviction that the substitution of inanimate for animal power on common roads was most important ; and they considered its practicability to have been "fully established," and predicted that its introduction would take place more or less rapidly, in proportion as the attention of scientific men was directed by public encouragement to further improvement.

As yet steam carriages have not had a fair trial, and there is no doubt that some day they will be in general use. An electric carriage would answer the purpose still better. Farey, one of the most dis-

tinguished engineers of that day, gave testimony to their great value, and the practicability of the system being universally introduced on our roads.

The Committee of the House of Commons concluded with the following memorandum :

1. That carriages can be propelled by steam on a common road at ten miles an hour.
2. That at this rate they can convey fourteen passengers.
3. That their entire weight does not exceed three tons.
4. That they can ascend and descend steep gradients with perfect safety.
5. That they are perfectly safe for passengers.
6. That, if properly constructed, they are not and need not be a nuisance.
7. That they are cheaper than carriages drawn by horses.
8. That they admit of greater width of tire than other carriages, and as the roads are not acted on injuriously by horses' feet as in common draught, they do not wear the roads out like horses do.

It seems a great pity that, the Committee of Inquiries having arrived at such conclusions, nothing more should have been done ; as from the time this Committee sat to consider the question, notwithstanding their favourable report, the scheme seems to have fallen to the ground. Had it not done so, I have no doubt that by this time every one who now keeps a carriage would have had one propelled by steam, and, to make the idea still more ludicrous, all the business of life which is now carried on by wheeled vehicles drawn by horses, would be dependent upon steam for their means of propulsion. I can scarcely imagine the Park, in the height of the season, or Piccadilly, or Belgravia, the scenes of such innovations. As I suppose, had road locomotion succeeded to the same extent as railway locomotion has done, ladies would drive their steam carriages in the Park, and the youth of the period would visit his club, and make his

afternoon calls, as naturally in a steam carriage as he does now in a T cart or smart buggy.

Lord William Lennox, in his book on coaching, says : " Many attempts have been made to introduce steam carriages on the roads, and, in 1822, Mr. (afterwards Sir) Goldsworthy Gurney—inventor of the steam-jet, emphatically called by engineers 'the life and soul of locomotion'—constructed a carriage for that purpose. To show that it was capable of ascending and descending hills, of maintaining a uniformity of speed, once a journey was undertaken from Hounslow Barracks to Bath and back. On arriving at Melksham, where a fair was being held, the people made an attack upon the steam carriage, wounding the stoker and the engineer severely on their heads by a volley of stones.

"The return journey was more satisfactory, as the whole distance (eighty-four miles), stoppages for fuel and water included, was travelled over in nine hours and twenty minutes, the carriage at one time increasing its speed to twenty miles an hour. The Duke of Wellington and his staff met the carriage at Hounslow Barracks, and were drawn in his Grace's barouche by the steam-engine into the town."

Why the countrymen at this fair should have savagely attacked the stoker and driver it is difficult to say. As no explanation is given of the circumstance, we should rather ascribe it to some trivial dispute having arisen between the country people at the fair and the men employed on the steam carriage, and not to a determined and organised resistance to the use of locomotives on common roads.

The same writer goes on to say "that in May, 1830, much attention was excited in the neighbourhood of

Portland Place by the appearance of a steam carriage which made its way through a crowded traffic without any perceptible impulse. There was neither smoke nor noise; there was no external force nor apparent directing agent; the carriage seemed to move by its own volition, passing by horses without giving them the least alarm. Five gentlemen and a lady constituted the passengers.

"One gentleman directed the moving principle or power, and another appeared to sit unconcerned behind, but his object was ascertained to be the care of the fuel and water. The carriage was lightly and conveniently built, not larger nor heavier than a phaeton. It went without the least vibration, and preserved a balance in its most complicated movements. The pace was varied from five to twelve miles an hour, according to pleasure."

This writer confirms my previous statement as to a steam carriage running on the road between Gloucester and Cheltenham. He describes the circumstance as follows:

"From February to June, 1831, steam carriages ran between Gloucester and Cheltenham regularly four times a day, during which time they carried nearly three thousand persons, and travelled nearly four thousand miles without a single accident. Every obstacle, however, was thrown in the way of this new invention; large heaps of stones were laid across the road eighteen inches deep, under the pretence of repairing the highway; and on an Act of Parliament being passed which imposed prohibitory tolls on turnpike trusts, the steam carriage was driven off the road. On the journey to Bath above referred to, the toll for the steam carriage was six guineas each time of passing."

At the present day there are very stringent laws in existence as to the working of road locomotives ; these were epitomised by Mr. Thomas Aveling. Road Locomotive Acts were passed in 1861, 1865, and 1878, for the use of owners and drivers, and were introduced into the Highway Act. The alterations made in the last Act related to the form of engine wheels, the consumption of smoke, the use of the red flag, and the times specified for travelling. It is undoubtedly the case that local and other authorities regard steam traffic upon common roads as a nuisance, to be put down if possible, and to be impeded when extinction is impossible.

Traction engines are, of course, very apt to frighten horses ; but this would not be the case were suitable steam carriages used, burning smokeless fuel, or made to consume their own smoke and steam, and so constructed as not to alarm horses by any great singularity in their appearance. But, of course, traction engines fulfil a very useful purpose in agriculture, and to do so they must move from place to place. I think that they might be compelled to travel on the road of a night, or early in the morning before people were about. With regard to the consumption of smoke, the Act says that—

Every locomotive used on any turnpike road or highway shall be constructed on the principle of consuming its own smoke ; and any person using any locomotive not so constructed, or not consuming, so far as practicable, its own smoke, shall be liable to a fine not exceeding five pounds for every day during which such locomotive is used on any such turnpike road or highway.

Regarding the limit of speed the Act goes on to say :

Subject and without prejudice to the regulations hereinafter authorised to be made by local authorities, it shall not be lawful to

drive any such locomotive along any turnpike road or public highway at a greater speed than four miles an hour, or through any city, town, or village at a greater speed than two miles an hour; and any person acting contrary thereto shall for every such offence, on summary conviction thereof, forfeit any sum not exceeding ten pounds.

The rules provided by this Act were as follows :

Every locomotive propelled by steam or any other than animal power on any turnpike road or public highway shall be worked according to the following rules and regulations, viz. :

FIRSTLY.—At least three persons shall be employed to drive or conduct such locomotive, and if more than two waggons or carriages be attached thereto, an additional person shall be employed, who shall take charge of such waggons or carriages.

SECONDLY.—One of such persons, while the locomotive is in motion, shall precede, by at least twenty yards, the locomotive on foot, and shall, in case of need, assist horses, and carriages drawn by horses, passing the same.

THIRDLY.—The drivers of such locomotive shall give as much space as possible for the passing of other traffic.

FOURTHLY.—The whistle of such locomotive shall not be sounded for any purpose whatever; nor shall the cylinder taps be opened within sight of any person riding, driving, leading, or in charge of a horse upon the road; nor shall the steam be allowed to attain a pressure such as to exceed the limit fixed by the safety-valve, so that no steam shall blow off when the locomotive is upon the road.

FIFTHLY.—Every such locomotive shall be instantly stopped on the person preceding the same, or any other person with a horse, or carriage drawn by a horse, putting up his hand as a signal to require such locomotive to be stopped.

SIXTHLY.—Any person in charge of any such locomotive shall provide two efficient lights to be affixed conspicuously, one at each side on the front of the same, between the hours of one hour after sunset and one hour before sunrise.

In the event of a non-compliance with any of the provisions of this section, the owner of the locomotive shall, on summary conviction thereof before two justices, be liable to a penalty not exceeding ten pounds; but it shall be lawful for such owner, on proving that he has incurred such penalty by reason

of the negligence or wilful default of any person in charge of or in attendance on such locomotive, to recover summarily from such person the whole or any part of the penalty he may have incurred as owner.

It was in consequence of all these restrictive Acts of Parliament that I gave up using a steam tricycle I designed and constructed about fifteen years ago. Were it not for these restrictions to their use, light steam carriages would long before this have been used on common roads, and so constructed as not to alarm horses or become a nuisance.

Notwithstanding the fast progress that has been made by the railway locomotive, road locomotion, except so far as regards the unsightly and terrible traction engine, has made no progress whatever, neither have engineers or men of science been encouraged to turn their attention to its development, for the very good reason that, no matter how perfect a steam carriage may be, it can never be used on the high-road except at so slow a speed and with such precautions that there would be no advantage whatever in its use or adoption. Were it not for this, luxurious steam carriages, such as broughams, victorias, etc., might be constructed, that would travel at a speed of twenty or thirty miles an hour, perfectly safe, and affording the utmost comfort. In towns, and in the suburbs thereof, they might be compelled to slacken speed, and to take every precaution necessary for the safety of the public.

Although there is this strong objection to steam locomotion on common roads, which has culminated in legislative enactments, it is to be hoped that there will not be the same objections raised to electric

locomotion, as I firmly believe that if an Act can be passed to encourage their construction, electric carriages will be made to travel at a great speed with perfect safety, and with none of the objectionable characteristics of a steam-engine. It will be merely a matter of charging the battery at intervals during the journey, and this could easily be done at the large towns in which one rested.

The following interesting account of a dog-cart propelled by electricity appeared in the *Morning Post* of January 6th, 1888, copied from *Engineering* :

AN ELECTRIC DOG-CART.—Mr. Volk, whose electric railway is known to all visitors to Brighton, has constructed an electrically driven dog-cart, which is attracting a good deal of attention there. It is driven by a half horse-power Immisch motor and sixteen small E. P. S. accumulators, which have a capacity equal to six hours' work. In the desire to keep the machinery light scarcely sufficient power has been provided, so that, although the vehicle will make a speed of nine miles an hour on asphalt, it only makes a speed of four miles on a soft macadam road, while, with two passengers, an incline of one in thirty is the limit of its climbing power. The motor runs at a high speed, and transmits its motion by means of a Reynolds chain to a countershaft, from which another chain carries the power to a four-foot wheel attached to one of the road wheels. This last driving wheel is formed of a series of blocks about one foot apart.—*Engineering*.

CHAPTER VII.

PAST AND PRESENT—EIGHTEENTH AND NINETEENTH CENTURIES.

One hundred years ago—Ill omens—Three-bottle men—Watchmen and Bow Street runners—Signboards—Village stocks—May-poles—Beating the bounds—Dick Turpin—"Stand, and deliver!"—Collecting—The ducking-stool—The majesty of the law—The last century—Encouraging virtue by exposing vice—Military patrols—An empty boast—An exchange of property—"I merely borrow"—Turpin's death—A sharp archbishop—"Remove that dangerous weapon"—Tyburn tree—Men of the time—Wars of the last century—Abolition of slavery—Yoho!—Washington Irving and an English coach—Virgil on driving.

THE eighteenth century was essentially the period of road travelling. One thing which has a material influence upon civilisation is the ease and speed with which one can perform long journeys.

Any person at the present day who is over sixty years of age should retain a vivid recollection of the mail and stage-coaches, although that mode of travelling may have only continued for a short period during the very earliest days of their childhood; but all persons now alive of seventy years and upwards must have passed much of their life amidst scenes familiar to travellers on the road previous to the introduction of railways.

The extreme limit of human life appears to be very little over a hundred. That people do live to such an age may be proved by the frequent statements to that effect in the newspapers. An old lady died lately near my house who was over a hundred years old. To remember any public event that took place a hundred years ago, a person must have lived very considerably beyond that age. It is an extraordinary thing to think that any one alive now actually existed in times which, to us, have become remote and historical; but that they can recollect such events is still more remarkable. Yet there have been known persons who can do this.

It is almost impossible to realise that such enormous changes should have taken place in the social and political aspect of affairs within a period occupied by a single life. The present age, which we consider so highly civilised, may, in the course of a hundred years, be regarded by our successors as a period quite as wanting in the comforts, conveniences, and luxuries of life as was England, in our opinion, a century ago.

It must be remembered that the fact of travelling by coach is not sufficient in itself to convey to the minds of the present generation the conditions under which a journey was performed a hundred years ago. To do this, the world must roll back upon the wheels of time, and country and town and their inhabitants must present exactly the same appearance to our eyes as they did to people who were on a journey at that period. Every modern improvement that now exists is a forcible reminder of the age in which we live. The reality of our surroundings makes it difficult for us to form an adequate conception of the circumstances

under which Englishmen travelled during the last century, neither can we picture to ourselves the various infinitesimal details of dress, manner, and custom that made that period so foreign to the present.

The aspect of affairs throughout England and Europe was vastly different from what it is now. In 1788 George III. was King of England, Louis XVI. was insecurely seated on the throne of France, and George Washington was President of the United States, America having declared her independence, and there is no doubt but that the States would belong to us now had it not been for the ridiculous and obstinate policy of Farmer George. France, shortly after this, was in the throes of her great Revolution, with all its attendant horror, terror, blasphemy, and anarchy, during which time the French ports were blockaded to the English, and those Englishmen who cared, or who could afford, to travel, were almost compelled by necessity to do so in their own country. In 1788 William Pitt, although only in his twenty-fourth year, was at the head of the English Government, fulfilling the duties of First Lord of the Treasury and Chancellor of the Exchequer, Lord Thurlow was Lord Chancellor, Lord Carmarthen was Home Secretary, and Lord Sydney Secretary of State for Foreign Affairs. This was the younger Pitt's first Administration.

One hundred years ago was not altogether the pleasantest time that an Englishman could have selected for a sojourn upon this planet. Only a few years previously the American War had been brought to a close, and White, in his celebrated "History of Selborne," says that "the summer that followed

upon that event was an amazing and portentous one ; there were alarming meteors and tremendous thunderstorms ; for many weeks of June, July, and August, the sun was clouded over with a smoky fog, that proceeded from whatever quarter the wind blew ; the sun when it rose and set was lurid and blood-coloured. This phenomenon prevailed over the whole of Europe ; people looked with superstitious awe upon this singular twilight." To Englishmen, particularly sensitive to meteorological influences, having lost America, they became fully convinced that their country was ruined ; to those of the French, who had time to think amidst the terror and confusion which everywhere prevailed during the Revolution, this peculiar phenomenon must have appeared as though it were an indication of the anger of Heaven, and of the vengeance that would overtake those that had brought their country to such a terrible pass.

As regards England, the money she spent in losing America, she afterwards succeeded in replacing in her exhausted treasury. The prevailing notion during the greater part of the reign of George III. was that England was in its declination, and these ideas were supplemented by positive assertions that her population was decreasing, and would go on doing so indefinitely ; but this is proved never to have been the case ; in fact, if it had been the case, it might, in a manner, have benefited the State, by relieving it of its surplus population, for whom there was no employment. Oliver Goldsmith admits that the depopulation which he deplures in his wonderful poem, the "Deserted Village," was nowhere to be seen in reality. In my previous chapters I have given a parody on this poem, and

also a table of the population of several towns throughout England in 1861 as compared with 1837, which will conclusively prove how greatly the population of England was increasing, even at that time ; and this was even more the case a hundred years ago, since the State, although they executed near upon two thousand persons during the year, thereby seriously diminishing the population in a ludicrous yet terrible fashion, did not then afford the same encouragement to emigration. Between 1751 and 1781 the population had increased at the rate of one million two hundred thousand ; and there was a still larger increase, of more than one million and a half, from 1781 to 1801 ; in fact, about the latter half of this twenty years, France having recovered from the effects of the Revolution, a new impetus appears to have been given to the great industries throughout Europe, although they were greatly interfered with by the successive wars of Napoleon. As for the condition of English husbandry during the last century, it was in the most deplorable state. Agricultural science was almost unknown ; in some respects, the condition and manners of the rural population were worse than they are now ; in other respects, they were a trifle better.

The country squires and squireens were, in those days, coarse and uneducated, and very intemperate in their habits. Amongst the country gentlemen it was thought to be almost a disgrace to rise from the table sober, and no disgrace to be found after dinner lying under it outrageously drunk. It is difficult to imagine that from such rough material could be created the educated, courteous landowners of another century. Fielding, the novelist, has given us in his novels some excellent types of the country gentlemen of those

days. As county justices their notions of law and their ideas of justice and morality were beneath contempt, their manners as well as their dialect and dress were provincial in the extreme ; but as the waste lands were reclaimed, fenced in, and brought under cultivation, so a like improvement was manifested in the minds and manners of country people of all classes, from the lords of the soil to those who tilled it. The gentlefolk of England at the present day no longer indulge at breakfast-time in strong ales and other intoxicating drinks, neither do they dine at four or five o'clock and prolong the dinner-hour late into the night, rising from the table in a state of intoxication.

It was the fashion in those days to drink port wine to excess ; gentlemen were frequently described as two or three-bottle men, as the case might be. Even William Pitt, with all the numerous virtues of which he was possessed, was strongly addicted to excessive indulgence in the wines of Oporto ; and this is said to have very materially hastened his death.

The country parson was little better in point of intelligence or behaviour than the squire. If we are to believe Fielding and other writers, drinking at some low village alehouse, or hanging about the servants' quarters of the big house, drinking and gormandising, was no unfrequent occupation amongst the lower orders of the clergy. As for schools, it is difficult to imagine nowadays how rough they were, or the terrible amount of ill-treatment to which boys in those days were subjected. Literature, too, was in a terrible state, and the difficulties attending publication were quite sufficient to deter any author, however sanguine ; besides which, no one could venture upon a literary career unless supported by some patron of rank and influence, as

was manifested by Dr. Johnson's long attendance on Lord Chesterfield, but this was very early in the century.

The condition of the Universities was most deplorable. Wilberforce, who in after years advocated so strenuously the abolition of the slave trade, was entered at St. John's, Cambridge, in 1776, at the age of seventeen. He says that, on his arrival at Cambridge, he found that the undergraduates drank hard, and that their conversation was even worse than their lives. As for work, they did none at all, but passed their time in cock-fighting, drinking, and creating disturbances. Corruption reigned in all the public offices. The medical profession was distracted by jealousies, rivalries, and ignorance. The law was made ridiculous by the absurd technicalities of the courts, and the ignorance manifested by barristers in the laws and constitution of their own country. As for members of the mercantile class, some years before, when Dr. Johnson was told that the society of Twickenham chiefly consisted of opulent traders retired from business, he replied: "Sir, I never much like that class of people, for they have generally lost the civility of tradesmen without acquiring the manners and habits of gentlemen."

Smollett, in his novel "*Roderick Random*," has very well described the journey undertaken by Random and his faithful follower Strap in a road waggon which they ascend by a ladder, and tumbling into the straw discover that they have for fellow-passengers several persons whom it would be difficult to imagine riding in a waggon at the present day, but to whom a journey on a coach would have been too expensive. The great dread of all persons travelling on the road in

those days was the fear of highwaymen. Highwaymen were an institution specially connected with stage-coaches, post-chaises, and travelling carriages; they were in their greatest glory when George III. occupied the throne.

In London there were no police, only the watchmen, sometimes called "Charlies," and the Bow Street runners. The watchmen were armed with long poles, and carried a lanthorn; they used to patrol the streets crying the hour every time the clock struck, also proclaiming the condition of the weather, if good or bad. They also used to wake those people who were going upon a journey. These old watchmen (for they were generally old men) used to be much ill-treated by the youngsters of that period when they came rioting from the taverns and coffee-houses where they had spent the night. The Bow Street runners were thief-takers, and were not instrumental in the prevention or even the detection of crime, but merely ran the criminal in after the crime was committed. When they had information of a house to be broken open or a mail to be robbed, they never interfered until the act had been perpetrated. When they were sure of a capital conviction, they would take their man and obtain £40 for blood money. The number of executions in those days was something terrible. To understand this, it must be remembered how many offences were awarded capital punishment. Townsend, the celebrated Bow Street runner, in 1783 said that "when Serjeant Adair was Recorder of London, there were forty persons hung at two executions."

The old novelists give us a very good idea of the condition of affairs in those days, Fielding in particular. The prisons were in a terrible state; there

was no distinction in the treatment of the prisoners ; besides which, those who could pay exorbitant fees were allowed great privileges and indulgencies. There had been no improvement made in the management of prisons for many years past, until in 1777 John Howard published his book on prisons, and awakened public attention to their deplorable and disgusting condition. Although the condition of the law is not even now what it should be, yet there is nothing like the amount of crime there was one hundred years ago. By lessening the severity of punishment, crime seems to have diminished rather than have increased ; in fact, throughout the present reign crime has diminished to an extraordinary extent, and there is no doubt it will continue to do so as the law becomes better administered and the sentences present a more uniform justice. At present, to read of the sentences inflicted by judges upon criminals who have committed offences of exactly the same nature, and in all points bearing a strong resemblance one to the other, is positively ludicrous. It is to be hoped that some day an Act of Parliament will be passed compelling judges to pass a certain sentence for a certain offence, and that they will not be permitted to exceed or diminish the amount of punishment except by permission of a higher tribunal, and then only when the circumstances of the case will necessitate the infliction of a certain increase or diminution of punishment. The amount of crime a century ago was, in a great measure, owing to the condition of the prisons and the modes of punishment, which provoked persons of an evil disposition into a course of depredation and warfare upon society. In country villages there was no other guardian of the peace but the parish beadle, a far more imposing

personage than the village policeman, and one far better calculated to strike terror into the hearts of village miscreants than the blue-coated, silver-buttoned, helmet-headed bobby of the present day.

It is more than possible that every time a coach passed through a village the beadle was quickly on the spot, particularly if it pulled up to deliver a passenger or a letter-bag, as it was then necessary for him to keep back the village children, upon whom the sight of his staff and big cocked hat had an awe-inspiring effect.

To the villages in those days there was generally a green, round which were clustered the cottages, and near to which stood the village inn, whilst the sign-post and swinging signboard frequently stood on the green itself; and these signboards were, in rare instances, works of art. Sir Peter Lely is said to have painted one, and other famous artists frequently condescended to do so, more for the fun of the thing than for anything else.

A Royal Academician, in his lately published Autobiography, admits having done so for an inn in Harrogate; but this sign was never hung in its legitimate position, but only on the walls of the sitting-room occupied by the proprietor of the inn for which it was intended.

On these village greens, as a matter of course, were the village stocks; and such things have been known, in some villages, as a ducking-stool. "Madam," said Dr. Johnson, in a conversation with Mrs. Knowles, "we have different modes of restraining evil; stocks for the men, a ducking-stool for women, and a pound for beasts."

The only thing which remains in common use

at the present time, is the pound for beasts ; for as human beings no longer treat one another like beasts, the stocks and the ducking-stool have disappeared. But the ducking-stool was a little out of fashion in Dr. Johnson's time, and more so still one hundred years ago.

It is mentioned in the *London Evening Post* of April 27th, 1745. "Last week," says that journal, "a woman that keeps the Queen's Head Ale House at Kingston in Surrey, was ordered by the court to be ducked for scolding, and was accordingly placed in the chair and ducked in the River Thames under Kingston Bridge, in the presence of 2000 or 3000 people."

According to verbal tradition, this punishment was inflicted at Kingston and other places up to the beginning of the present century.

Mr. Cole, the antiquary, writing about 1780, says : "In my time, when I was a boy, and lived with my grandfather in a great corner house at the bridge foot next to Magdalen College, Cambridge, I remember to have seen a woman ducked for scolding."

On most village greens there were stocks, and in some villages a whipping-post. On May 5th, 1713, the Corporation of Doncaster ordered a whipping-post to be set up at the stocks, at Butcher's Cross, for punishing vagrants and sturdy beggars.* The stocks were often so constructed as to serve both for stocks and whipping-post : and the posts which supported the stocks, being made sufficiently high, were furnished near the top with iron clasps to fasten round the wrists of the offender and hold him securely

* *Notes and Queries*, vol. xvii., 327.

during the infliction of the punishment. Sometimes a single post was made to serve both purposes, clasps being provided near the top for the wrists when used as a whipping-post, and similar clasps below for the ankles when used as stocks, in which case the culprit sat on a bench behind the post, so that his legs, when fastened to the post, were in a horizontal position. Stocks and whipping-posts of this description still exist in many places, and persons are still living who have been subjected to both kinds of punishment for which they were designed. Latterly, under the influence we may suppose of growing humanity, the whipping part of the apparatus was dispensed with, and after a time the stocks were also disused.

The stocks was a simple arrangement for exposing a culprit on a bench confined by having his ankles held fast in holes under a movable board. Each parish had one usually close to the churchyard, but sometimes in more solitary places.

There is an amusing story told of Lord Camden, when a barrister, having been fastened up in the stocks on the top of a hill, in order to gratify his curiosity on the subject. He was, however, left there by the absent-minded friend who had locked him in, and he found it impossible to procure his liberation for the greater part of the day. On his entreating a chance traveller to release him, the man shook his head, and passed on, remarking that "of course he was not put there for nothing."

Nowadays, the stocks are in most places removed as an unpopular object; or we see little more than the remains of them left. The whipping of female vagrants was expressly forbidden by a statute of 1791.

Before the erection of the whipping-post, vagrants

used to be tied to the cart-tail and whipped throughout the village; in fact, the laws against vagrancy were exceedingly cruel. Men and women were whipped at Worcester till the close of the last century, as may be seen by the corporation records; the plan was to strip them to the waist, and whip them until blood came. Young girls used to be whipped in this manner for merely wandering about without any fixed place of habitation, or for begging.

All these things were witnessed by travellers in those days; and then there were the great village fairs, and the festivities on May Day, when Jack-in-the-Green was "*en évidence*," and the village beauty was enthroned and crowned as Queen of May. This last old custom is a very delightful one, and there is no doubt that by perpetuating it we greatly contribute to the amusement of people whose lives are not remarkable for any great amount of enjoyment. May Day is perhaps one of the most noteworthy of these past customs, the celebration of which must have been witnessed by many travellers on the old coaches as they passed through village after village on the first of May. Chambers says that in England we have to go back several generations to find the observance of May Day in its fullest development; even the king and queen were accustomed to join in the maying festivities. In Chaucer's "*Court of Love*" we read that, early on May Day, "*Forth goeth all the court, both most and least to fetch the flowers fresh.*" In fact, in the reign of Henry VIII., of murderous memory, the heads of the Corporation of London went out into the high grounds of Kent to gather in the may; the king and his queen, Catherine of Arragon, coming from their palace at Greenwich, and meeting them at Shooter's Hill.

One can scarcely imagine a fat old alderman searching for wild flowers, and waddling home with great branches of may-blossom, whilst an H.R.H. meets him on his return journey, and congratulates him on the fact.

It was the custom to decorate the doors and windows with flowers and branches of may ; besides which every old town and village had a May-pole as high as the mast of a vessel of a hundred tons, on which every year as May Day returned there were suspended wreaths of flowers, and round this May-pole villagers or townspeople were wont to dance. The May-pole, as it was called, was as much an institution of village life a hundred years ago as the parish church or the parish stocks.

Washington Irving, who visited England early in this century, records in his "Sketch-Book," that to his delight he had seen an old English May-pole. At the present day it is only the little children of the village who perpetuate this custom that once was regarded as so important. The children in my own village, on the first of May, come to my front door with bunches of wild flowers tied to sticks. The flowers are a good deal damaged by their rough handling, and the children appear very uncertain as to what they are to do with themselves or the sticks which they grasp so nervously in their grubby little hands. They sing a few songs, and, receiving a suitable recompense, they go on their way rejoicing to visit other houses to solicit more contributions. Taking them all round, there are not more than a dozen children at the outside, and in other villages throughout England I have no doubt this is about the extent to which May Day is now celebrated. Yet it is only two hundred years ago that there was a May-pole in the Strand,

which was said to be one hundred and thirty-four feet high ; but this was subsequently removed. A writer in the year 1800, facetiously and inquiringly remarks :

What's not destroyed
By Time's relentless hand ?
Where's Troy ?—and where's
The May-pole in the Strand ?

But there always appears to me to be some wisdom in this old custom of celebrating May Day, since every one should rejoice at the return of warm weather, except it be those who love hunting better than any pastime. Certainly the coachman, guards, and passengers on a coach must have rejoiced at the approach of summer, although in our uncertain climate the whole month of May is frequently terribly cold : perhaps one hundred years ago the clerk of the weather was less irregular in his proceedings. In the garden of the Palais Royal there is a cannon, above the vent-hole in the breech of which there is a magnifying or burning-glass. This is so focussed and directed that when the sun's rays are sufficiently strong the powder becomes ignited and the cannon is discharged ; then do Parisians become acquainted with the fact that summer is approaching by an audible proof.

Beating the bounds was another strange custom prevailing in towns and villages one hundred years ago. Chambers says that it was designed to supplicate the divine blessing on the fruits of the earth, and to preserve in all classes of the community a due respect for the bounds of parochial and individual property. Refreshments were provided for those who undertook to beat the bounds ; in fact, at Edgcote, in Buckinghamshire, there was an acre of land, let at three pounds a year, which was left to the parish officers to defray the expenses of such annual peram-

bulation of the parish. At Husburne Crawley, in Bedfordshire, four pounds are spent once in seven years to defray the expenses of perambulating and marking out the boundaries of the parish. They were often opposed by the owners of property over which they proceeded, and have frequently been prosecuted for trespass, but the judges have always decided in favour of the boundary beaters. If a canal had been cut through the parish, or a river obstructed the way, they had to swim or cross it in boats. If a house had been erected on the boundary line, the procession claimed the right to pass through it.

But with all these innocent customs and old-fashioned observances, one must not be oblivious of the fact that England was anything but innocent one hundred years ago : life and property were both exposed to frequent attacks. There were any number of highwaymen, footpads, and housebreakers ready to take advantage of any moment when either property was insecurely guarded or the temptation to possess it became too overpowering to be resisted. Highwaymen especially were the terror of the road. Every one has heard of Dick Turpin. He was no mythical character, but actually existed. He was born 1711, and was executed at York in 1739 ; consequently he was twenty-eight years of age at the time of his execution. He has been immortalised by Harrison Ainsworth. Claud Duval lived a great time before. He was born in 1670, and consequently had very little to do with robbing stage-coaches ; but since the days of Dick Turpin there was a famous highwayman called Galloping Dick, who was executed at Aylesbury in 1800 ; and still later than this lived Captain Grant, the Irish highwayman, executed at Maryborough in 1816. The lower classes in those days appear to have had

great sympathy for the knights of the road, possibly because they had no occasion to rob the poor; and it was evident that the rising generation of shop-lads and apprentices of those days was much impressed with the exciting and adventurous life led by these gentlemen of the road. In fact, there is an old ballad which runs as follows :

Hurrah for the road ! my steed, hurrah !
Through bush, through brake go we ;
'Tis ever a virtue, when others pay,
To ruffle it merrily !
Oh, there never was life like the robbers—so
Jolly, and bold, and free :—
And its end ?—why, a cheer from the crowd below,
And a leap from the leafless tree !

The road that passes over Shooter's Hill near Blackheath, was once the great Roman road from Dover to London; it was on this road that Turpin made many of his successful raids on travellers; in fact, this spot was a favourite one for these tax-gatherers of the highway. Byron has immortalised it in verse by selecting it for the robbery of Don Juan. Turpin's real name was Richard Palmer; the position of his family was a very good one, but he, being apprehended for poaching, made his escape and fled from his home. Turpin's first collection, for so it was called in those days, was the robbery of the steward of Squire Norton in Epping Forest; he was conveying his master's rents to London to deposit them in the bank, and was travelling in his master's coach when he was stopped by Turpin, who was riding the celebrated Black Bess, which, although it did not then belong to him, afterwards became his property. The carriage which he stopped had only emerged from the "Spread Eagle," a well-known inn in Epping Forest, about

half-an-hour before ; it was one of those huge carriages common enough in those days ; they were generally, as was the case in this instance, drawn by clumsy, high-crested Flemish horses, and, consequently, they travelled very slowly. When the carriage approached, Turpin and his accomplice, who had been hidden amongst some trees by the roadside, moved swiftly out into the middle of the road ; Turpin was quickly at the door of the coach, crying out, "Stand and deliver," whilst the other highwayman sprang to the horses' heads and arrested their further progress. Four stout canvas bags, containing the rent, were, after much hesitation, thrown out on the road by the alarmed steward, who was then allowed to continue his journey ; but, as the two highwaymen were picking up the bags, the steward, having recovered from his fright, managed to fire a parting shot, which whistled harmlessly over their heads. Nevertheless, shortly after this, they were pursued by a party of foxhunters, who had been informed of the robbery ; and it is alleged that on nearing the Thames, at a spot formed by the *embouchure* of the creek dividing Plaistow Level from the broad level of Barking, and known as Creek Point, they took to the Thames, and with their horses swam across the river, hiding their money-bags before they proceeded to do so ; after which they plunged boldly into the stream, and with much difficulty reached the opposite bank in safety. This is one of the many tales told of Turpin's daring exploits, and is mentioned very positively in an old book of the period ; his companion on this occasion was named Fielder.

Not long after this he stopped Tom King, another celebrated highwayman who knew Turpin, although Turpin did not know him. "What!" cried King, "dog rob dog? Why, strike me ugly, if that's not

good!" But the matter having been satisfactorily explained, and King's identity having been proved beyond doubt, these two rascals were ever afterwards capital friends.

I cannot be answerable for all the tales told of Turpin, but have chosen those fictions which possess a substratum of truth. He is said to have stopped Lord C.'s coach. Tom King, the highwayman, with whom Turpin became very intimate, had suggested his doing so. Highwaymen, who by their nefarious trade managed to live like gentlemen, in frequenting Vauxhall, Ranelagh Gardens, and the noted coffee and gambling-houses, frequently scraped acquaintance with the gentlemen and noblemen of that period; such is stated to have been the case with King. Lord C. was very well known to him, so an old writer declares. Notwithstanding this fact, he agreed with Turpin to stop his lordship's coach; the account of his doing so is so graphic that I do not think I can do better than give it literally, since it affords us the opportunity of judging how these light-fingered gentry became possessed of their fortunes, which ill-gotten gains were frequently squandered in a single night at the gaming-tables which then abounded in all parts of the metropolis; it was a case of light come, light go.

When King had thoroughly explained his views, Turpin readily agreed to them. "I like it much," replied he; "here's my hand on't; and for my part of the business, fortune favouring, consider it as done. You must not, however, be seen, Tom, as he will be sure to recognise you, though I did not. Leave it all to me; only detain our bird a few minutes at the 'Star,' and if I don't pluck his feathers, call me a bungler if you like."

"I don't approve of your having all the danger,

though," said King; "I'll be at hand in case of necessity."

"Pooh, pooh! never fear; d'ye think I'll sloven it? Show me the rattler,* so that I may know it when I see it again, and I'll undertake to catalogue its contents."

Matters were soon arranged, and King then rode forward to the inn at which the young nobleman was expected. He soon after arrived. Being personally acquainted with Tom from a town introduction—he was on his way to his country seat—he was rejoiced at this unexpected *rencontre* with a pleasant fellow. Wine was liberally ordered, and a merry hour and a half was passed, while Dick spent the interval in making the necessary arrangements for the success of their exploit.

The sun set, and up rose the moon that was to witness so much mischief. "The devil's in that moon," Lord C. would have thought had he known what was to befall him in the next hour.

After some hearty shakes of the hand, and an appointment to meet in London at a future day, Tom King bade good-bye to his aristocratic bottle companion.

The night was beautiful. The broad, bright summer moon silvered the foliage of the massive and majestic timber which clothed both vale and upland thereabout; there was scarcely enough motion in the air to shake the leaves on the trees that bordered the high-road. It was just the night for the nightingale to pour forth its song from the coppice undisturbed.

The rattle of Lord C.'s coach-wheels resounded on the still night air. His attendants consisted of

* Carriage.

his valet and a postillion. The coach entered a narrow lane, where long rows of lofty over-arching elms threw dense shadows on the roadway. It had advanced some fifty yards along this avenue when the horse on which the post-boy rode suddenly shied, and, tossing his head, reared at some obstacle on the ground. His rider spurred him on and he fell, dragging with him the off-horse, who had also stopped short.

The boy rolled from the saddle, the valet leaped from the rumble, and, opening the carriage door, inquired if his lordship was hurt—a question more polite than necessary, seeing that nothing had happened that was likely to hurt him. His lordship was just enjoying a doze, to which the sultriness of the evening and the fumes of the wine he had imbibed had disposed him, when he was awoke by the sudden stoppage and by his valet's inquiry.

"What the devil's the matter now, Stevens? 'Sblood! a horse down, eh? Help the lad to get him up, then, and be d——d to you. Stab me, but you stare like a fool. Shut the door, fellow; I'm drowsy."

A minute after, Stevens again softly opened the door.

"My lord," said he, almost in a whisper, "we can't get on; there's one of the horses disabled by his fall. One would think that 'twas done designedly, for there's a small tree across the road, and the bark so peeled off it that the best eyes couldn't see it in the moonlight. Shall I go back to the 'Star,' my lord, or——"

"You may go to the devil, you fool!" vociferated the angry nobleman; for, in those days, the elegant accomplishments of hard swearing, hard drinking, and

abusive language to servants and subordinates, were distinguishing features of a man of *ton*, to which character his lordship laid a strong claim. "'Sblood, but the road surveyors hereabout shall hear of this, the d——d scoundrels! That extortionate numskull, too, mine host of the 'Star,' to send a nobleman forward with such floundering cats'-meat. Demme! but I'll horsewhip him round his own yard—strike me dumb, but I will!"

His lordship, having by this time sworn himself awake, looked out of the front window of the vehicle with a languid yawn.

"Stevens," said he—the valet again hastened to the carriage door—"Stevens, what the devil's the use of your running away? Can't the young scamp there ride back for the fresh horses as well as you, you blockhead?"

"Certainly, my lord," replied Stevens obsequiously; and the boy accordingly mounted the uninjured horse, and rode back to the "Star."

He had scarcely cleared the lane when a man stepped from behind a tree at the roadside.

"Down on your knees, or I fire!" said he, in a gruff undertone, to the valet, at the same time presenting a pistol to his ear.

The gentleman's gentleman dropped instantly at the word of command, and Turpin, with a significant gesture, stepped towards the open coach-door. His lordship had thrown himself back, and as he had sworn himself awake, was now reversing the process, and proving its efficacy by an endeavour to curse himself to sleep again, when a strange voice prevented the progress of his experiment by bidding him "Stand, and deliver!" His lordship was certainly astonished, but not being constitutionally timid, he soon saw how

matters were. Yet the coolness and assurance of the highwayman, who stood at the door, while Stevens knelt in the dusty road at some couple of yards distance, staggered him. He placed his hand in a pocket of the carriage, and drawing forth one of his travelling pistols, levelled it deliberately at Turpin's head.

"Stevens!" shouted he.

"Stevens knows better than to stir," replied the highwayman, pointing his pistol for an instant in the direction of the valet.

His lordship seized the opportunity, and drew the trigger, but no sound was heard but the click of the flint. Our hero turned to him with a smile.

"Upon my word, my lord," said he coolly, "I'm obliged to your lordship for rebuking my bad manners in not attending to you first. I have to apologise——"

The enraged nobleman had snatched the other pistol from its receptacle, but again the provoking flash of the priming powder whiffed off in smoke! He angrily hurled the harmless weapon at Turpin, who, ducking his head, avoided the missile. His lordship then threw himself back on his seat, with the air of a man who has left all to fate, and is perfectly resigned to the inevitable.

"Much obliged, certainly, for your kind intention," resumed Dick, "but, my lord, next time you feel inclined to shoot anybody, take the precaution of seeing your pistols haven't had their charges drawn. It is a bad world we live in," added he, without altering the tone of his voice or dismissing the smile which played on so much of his face as was not hidden by the mask he wore. His lordship was thoroughly amazed at his impudence and at the condition of his firearms. "And now, if you please, we'll discuss

business," said Turpin. "I must trouble you for your loose cash, my lord" (a purse was handed to him). "And now, if you please, I'll take your watch; it is a handsome one, I know" (his lordship drew it slowly from his fob). "That diamond on your finger; and I'll also thank you for the miniature you carry about you of a lovely lady, of whom, my lord, we'll say nothing—but that I know you have it."

All but the last-named article was delivered with the air of a martyr or a helpless and resigned man; but at the last demand his lordship found his tongue.

"Gadzooks, Mr. Highwayman," said he, "I'm sorry I did not know you better. I take it you're a gentleman; and as it seems"—(his lordship here unbuttoned his coat, and drew forth a picture)—"you know of this—though stifle me if I can guess where you got your information—I'll make an appeal to you. The picture I'll not part with, demme"—(his lordship grew warm)—"and if you're the blood I take you to be, you'll not insist on it. Name the terms, and I'll redeem my pledged word like a man of honour and a gentleman—demme!"

"Why, really," replied Dick, "I have wasted too much time already. I forgive you the attempt you made to provide for me in another world; and as I've reason to believe your lordship really has an affection for this picture, and I've no wish to disfigure it by breaking its frame, say thirty guineas. You assent? Then an order for thirty guineas on your agent in Coombe will do, and I'll ensure its presentation before your lordship can trouble him with any advice on the subject."

Lord C. drew forth his pocket-book, and, extracting a leaf, wrote the required order. Turpin looked narrowly at it, folded it, and, bowing low with an air

of mock reverence to his lordship, closed the coach-door. A low whistle was heard, and he disappeared through the gap in the hedge by which he had come.

All this while the valiant Stevens had knelt, with a piteous and alarmed aspect, in the road. His master looked out, and, despite his vexation at the untoward affair, could not keep his gravity at viewing the pale and affrighted countenance of his terrified menial.

"By gad!" exclaimed he, "may I be struck comical if you are not the drollest picture of a goose at his last gasp I'd ever the luck to see! Why, what in the name of all that's miserable ails the man? Get up with you."

Stevens rose from his genuflexions.

The whistle Turpin had heard was the signal of the approach of the horses and assistance. They came, the obstruction was removed, and his lordship once more proceeded on his journey. We need not say the order was presented and duly honoured.

Some little way back, I have spoken of the apparatus that was made use of to pacify scolding wives, and in fact all women of the lower class who, when they lost their tempers, allowed their tongues to get the better of their discretion. Dick Turpin's biographer gives an animated description of the way in which this punishment was inflicted. He says:

"A day or two after their return to town, Turpin and his friend Tom King were sauntering down Margaret Lane, with the intention of idling an hour at Oliver's to learn the news of the day, when, as they were about to turn into Palace Yard, they were passed by a motley rabble of ragged boys, unwashed costermongers, and slipshod women, shouting most vociferously, thrusting and elbowing towards a knot of

blackguards who were carrying a woman, apparently drunk, in the midst of them.

“‘Hurrah for Roaring Peg!’ cried the disorderly mob. ‘Hurrah for the ducking-stool!* hurrah! hurrah!’ and onward rushed the riff-raff down the narrow avenue of Dirty Lane. Bellowing and shouting, on they passed, and turning by ‘Purgatory,’ they took their way to the river-side.

“‘Shall we follow, and see the sport?’ suggested Dick Turpin. ‘What the deuce does it all mean?’

“‘Have you never seen the cooling discipline?’ asked King.

“Dick replied in the negative.

“‘Have with you, then,’ said Tom; and the friends followed the riotous assemblage.

“Arrived at the spot, they witnessed a curious scene. The victim of this popular discipline was a muscular virago of some forty years old, and displayed in her neglected person and face the wreck of a once handsome woman, destroyed by a long course of drunkenness. In spite of her kicks and struggles, she was thrust into a strong and clumsily-constructed arm-chair, and a rod of iron being passed through a hole near the extremity of each arm, her body was effectually secured therein. This chair was attached by a chain and rope to the longer lever of a huge wooden beam, and, by the united efforts of a number of men, the drunken scold was elevated in the air amid the vociferations of the delighted mob.

“‘Now, my lads,’ exclaimed the beadle, who was

* “The ducking-stool stood at the end of Dirty Lane, near the building called Purgatory; it was removed about 1738.”—See Smith’s “History and Antiquities of Westminster,” London, 1807, where a description of the apparatus is given.

master of the ceremonies on this important occasion, 'stick to your tackle; stand clear, there!' and he applied his rattan lustily to the shoulders of the junior branches of the bystanders, avoiding with astonishing dexterity, only to be acquired by long practice, falling into the error he was so often challenged to commit, of 'hitting any one of his own size.'

"The ponderous machine swung upon the post which formed its fulcrum, and, by half a revolution, placed the virago in mid-air, her legs performing sundry eccentric fandangos over the river, which was now at high tide.

" 'Hurrah! hurrah for Roaring Peg!' shouted the multitude.

"The unfortunate victim of the popular discipline cursed and raved; but her imprecations were inaudible in the roar of the many-throated voice of the sovereign people.

"The gold-laced functionary, having allowed the tumult in some degree to wear itself out and subside, gave the signal. The loosened cord, passing over a pulley fixed to the shorter arm of the lever, allowed the chair to descend until the inveterate scold disappeared over head and ears in the muddy water of the Thames. Again the chair rose, and again, spluttering oaths and imprecations, was its unlucky feminine occupant immersed.

" 'Hold hard!' cried the beadle, raising his cane; the fellows who worked the apparatus gave it a half-turn, and the beadle, keeping a respectful distance from the dripping and wretched creature, proceeded to interrogate, with the air of a chief inquisitor.

" 'Well, Mistress Peg, you see "long-threatened

come at last." Will you promise not to give me and these gentlemen here so much trouble again?'

"Peg's reply was too strong for 'ears polite.'

"'So, so,' exclaimed the insulted Bumble. 'I see—still owdacious against the mighty majesty of the law! We'll cure her, I'll warrant. Now, lads, another dip; yeo, ho! and away!'

"'Mister Beadle!' screamed Peg; but her remonstrance was too late. She had refused the proffered amnesty, and the beadle felt his condescension misplaced.

"The ponderous beam revolved, the chair descended, and Peg plunged again, 'hissing hot, into the bosom of the Thames.'

"This time, in obedience to a gesture of the director, a momentary pause took place during the submersion ere the beam again rose, and exhibited the wretched creature to the derision and laughter of the populace. The last prolonged dip had effectually cooled her.

"'For the love of mercy, good Mister Beadle, let me out!' exclaimed she; 'oh, pray let me out! Oh do! I'll never agen, s'elp me—— Oh, oh!'

"'Land her, boys,' cried the beadle; but to this some of the mischievous assistants in the ceremony demurred.

"'Let's give her another dip, mister; it'll do her a mort o' good,' remonstrated they.

"But the dignitary knew that concession to the demands of a mob is fatal to the supremacy of the ruler; so, to preserve his character of beadle-craft, in imitation of greater potentates, he peremptorily vetoed the popular proposition. The arm was accordingly swung round, and poor Peg, completely conquered, deposited on *terra firma*; and the beadle, after exacting

a public and unconditional promise of peaceable conduct, ordered her release ; and the victim of intoxication and vituperative passion staggered homeward."

But to return to matters more nearly connected with our subject, the condition of England a hundred years ago. The stage-coaches then used to be advertised to start from York, God willing, on a certain day in the year of our Lord 1739, and these same coaches would arrive, " Providence remaining willing," in London some eight or ten days later. A writer calls our attention to this fact, and says :

" This may serve to give some notion of the uncertainty of communication ; and this uncertainty was an element of safety to the highwayman, who, in this age of fast coaches and railroads, exists no more. The highwayman who took a purse on the road had only to ride across the country, and he was, comparatively speaking, as safe from pursuit or recognition as if, at this time, he betook himself to some distant land. The merchant, the lawyer, the farmer, the grazier, the commercial traveller knew not the safety of banks, the convenience of paper currency, or the accommodation of a ready and rapid transmission of valuables by post. The grazier who drove up his live stock from the North, returned, by easy stages on horseback, in or out of company, as he might happen to be prudent or incautious, bold or cowardly, with the proceeds of his speculation in ' bright gold.' The farmer took his way to market with leathern or canvas bag well or scantily furnished, as his worldly means might permit. The commercial traveller proceeded on his rounds, with goods of the more valuable and lighter descriptions in bulk, on pack-horses, or by the broad-wheeled waggon. In the days of Fielding

and of Smollett, we find such persons as clergymen and men of a respectable rank in life, travelling by waggon, a conveyance now* confined to the lowest and most needy of the populace. For the shorter distances round London and the great towns, there were, it is true, stage-coaches; but these, from the slowness of their motion, were overtaken or stopped at pleasure, and thus they offered an easy prey to the knights of the road. Another cause of impunity and the contempt with which the laws were treated by the violators of them, was the corruption and insufficiency of our protective regulations. There were no police. A more consummate set of scoundrels, as our criminal annals bear witness, could not have been found than the subordinate officers of justice. The lapse of a few years shows us no less than seven thief-takers who ended their days on 'Tyburn tree,' for various desperate crimes of which they had been convicted. The roads in the neighbourhood of the metropolis were so infested with robbers, that the Duke of Newcastle of that period declared that for a man of rank and property to travel fifty miles unmolested was so unusual a fact that it was quite exceptional. The character of Macheath, in *The Beggars' Opera*, was not in the slightest degree overdrawn, though some modern critics declare it to be so. The petty larceny knave of these degenerate days (1830) of thieving can furnish no point of comparison with the dashing, well-dressed, well-mounted men, who rode forth with loaded pistols and jauntily-cocked hats to stop a gentleman's carriage or rob the mail. It is true that they did so at the risk of their lives, not so much dreading the scaffold as the pistol

* This work from which I quote was published 1830.

or the blunderbuss loaded with slugs of the travellers whom they boldly bade 'Stand and deliver!' Many are the anecdotes of the generosity of these knights errant—Turpin, King, and their comrades."

Speaking of thieves, Shakespeare makes Timon of Athens thus address a thief:

You must eat men. Yet thanks I must you con
That you are thieves profess'd; that you work not
In holier shapes: for there is boundless theft
In limited professions. Rascal thieves,
Here's gold: Go, suck the subtle blood of the grape,
Till the high fever seeth your blood to froth,
And so 'scape hanging. Trust not the physician;
His antidotes are poison, and he slays
More than you rob. Take wealth and lives together;
Do villainy, do, since you profess to do 't,
Like workmen. I'll example you with thievery:
The sun's a thief, and with his great attraction
Robs the vast sea: the moon's an arrant thief,
And her pale fire she snatches from the sun:
The sea's a thief, whose liquid surge resolves
The moon into salt tears: the earth's a thief,
That feeds and breeds by a composture stolen
From general excrement: each thing's a thief.
The laws, your curb and whip, in their rough power
Have uncheck'd theft. Love not yourselves: away;
Rob one another. There's more gold: Cut throats;
All that you meet are thieves: To Athens go;
Break open shops; nothing can you steal,
But thieves do lose it: Steal not less, for this
I give you; and gold confound you howsoever.

Timon of Athens, sc. iii.

Although highwaymen may have robbed in a gallant fashion, and in manner and appearance were often the equals of gentlemen of good birth, yet they were none the less thieves. An old writer on this subject, in the *Quarterly Review*, makes the following remark. He says that "it is dangerous to expose vice, lest we contaminate the imaginations of those who are yet innocent and virtuous." And there is no doubt that

the popular works of fiction which used to make heroes of house-breakers and highwaymen, did a vast amount of injury amongst the rising generation of the last century. In fact, even later, Harrison Ainsworth might have chosen more virtuous heroes for his novels than Jack Sheppard and Dick Turpin. "

Another writer who seems well acquainted with facts relating to the criminal classes of the last century, says that "ignorance and innocence are synonymous terms." This is a libel on virtue, for it is as much as saying that, in the absence of guilty knowledge of crime mankind eschews its commission. But this is not the argument of a healthy mind. Were this the case they would evince no more sagacity than the ostrich, who plunges his head into the sand, in the belief that by doing so, the whole of his body will be hidden.

The Spartans intoxicated their helots to deter them from drunkenness, by showing the degradation of their minds and bodies when subjected to such a process. This is very much like allowing a lad or young woman engaged in a pastry-cook's shop to devour as many sweetmeats as they like, in order that by surfeiting them with these dainties, they may come to dislike them, so that the proprietor of the shop may be ensured against future loss from their depredations. It is on this principle, and with this object in view, that old fictional writers of the last century made heroes of highwaymen and house-breakers, so that the knowledge and punishment of crime might act as a deterrent to the youth of that period.

Turpin, in conjunction with Tom King, robbed whenever he had a chance, mostly confining his exploits to the highway ; but one robbery very much

resembled another. Information was first lodged with Turpin by scouts whom he employed, as to the contemplated journey of some one carrying a well-filled purse, or bearing with him treasure which he intended depositing in a bank or other place of safety. Every opportunity was taken of acquiring knowledge as to the route to be pursued by wealthy travellers ; besides which, if any such opportunity offered, the travellers' firearms were tampered with, so that when they were stopped, and were prepared to offer resistance, their old flint pistols and blunderbusses merely flashed in the pan, without producing the expected discharge that was to send the highwayman upon the longest of all journeys never to return.

The following account, which I have slightly edited, is from the same writer :

Turpin also robbed a Mr. Major. This gentleman was mounted on a thorough-bred horse at the time of the robbery. He had been dining with a Justice of the Peace, or rather, having supper, for the convivial meeting had been carried far into the night, and when Mr. Major rose from the table the wax-lights were flickering low in their sockets, and the daylight was slowly stealing through the window-blinds. As for the "worshipful company," many of them were county magistrates, landowners, with one or two parsons ; all of these enlightened individuals would have been scandalised at the bare idea of encouraging education, or proficiency in refinement, or at the mere mention of total abstinence, or, in fact, of anything that would improve the social and moral condition of country communities. These fine old English gentlemen had partaken of such fine old English hospitality, that they were all dead drunk, and lying under the table

or upon chairs and sofas scattered about the room, with the exception of Mr. Major, who, opening the door, called his servant, and announced his intention of riding home.

"Let White-stockings be saddled," he said, "and make haste."

"Ay, ay, sir," replied the man.

White-stockings was saddled, and Mr. Major took his way along the avenue leading from the mansion where he had been dining, much refreshed by the "balmy breath of incense-breathing morn." He slackened the pace of his horse as he reached the high-road. Still feeling the effects of his share in the night's debauch, he rode on leisurely with a loosened rein. His horse was one which he had hunted, and it might be said to have but two paces—a walk and a gallop.

The racehorse of a hundred years ago, though not equal in speed to the finer-bred animal of the modern turf, had more bone and lasting qualities, and was up to great weight; in fact, the old "King's Plate" horse of those days, though unfit to compete for short distances with the higher-bred nag of the present time, made up in bone and endurance what he lacked in blood and swiftness.

The subject of conversation at the dinner-table the night before amongst the magistrates present, had been the recent robberies, and the advisability of a communication to the Secretary of State, praying that a troop of dragoons might patrol the road thereabout, not an uncommon practice in the neighbourhood of London at that time.*

* From this employment of soldiers, the state of public safety on the highways may be well imagined. Several instances of their being engaged to patrol the roads may be found incidentally in the sketch of Turpin in the "Malefactors' Register"; in "The Life of Gentleman

Whilst Mr. Major was thus musing, the regular sound of a horse at full speed rose on his ear; the rider was evidently going the same road, namely, that towards London.

"Here's company, at any rate," said he; "and pretty well mounted, if I may guess from the pace."

The horseman came up, and courteous salutations were exchanged.

"Fine morning, sir," observed Turpin, for it was he; "going far on this road?"

"Some four miles; nearly to Plaistow," replied Mr. Major. "Early out this morning. That's a pretty beast of yours."

Turpin replied merely by patting his horse's neck, and the conversation turned on indifferent topics.

Nothing was further from Dick's mind than doing what he termed "business" with the gentleman whom he thus met at the very entrance of the clump of houses at Trap's Hill. They rode on amicably, and in reply to an inquiry on the part of Mr. Major, Dick informed him that his name was Cutler; that he resided at Hoddesdon, in Hertfordshire, but having occasion to call on a relation at Epping on his way to town on urgent business, he had slept there on account of the unsafeness of the roads, and had started with the morning's dawn. The frank manner of Dick, and his manly bearing, prejudiced Mr. Major in his favour; yet being—like most sporting men—not a little given to braggadocio, he could not forbear laughing at Turpin's apprehensions.

"I never had the luck," said he, "to meet any of these fire-eating blades; yet as the gentry here-

Harry" (who was executed at Tyburn, 1754), London, 8vo, 1754; in *The London Magazine*, and in several contemporaneous tracts.

abouts have requested me, I've put my signature to the requisition for the military. If I knew two or three whose staunchness I could rely on, demme, but I'd have a try to trap some of these knights of the road. There's Colonel Asher, the Justice's brother; 'tis true he's a military man, but I don't value him a straw. The humbug, when I asked his opinion, prated as if he were about to open a campaign on the Rhine against King Louis, instead of nabbing some three or four scurvy desperadoes. No, no; he's no good! It's one Dick Turpin" (Dick turned his head to conceal a smile) "they talk about most, and I've more than a guess that there's something in the notion that he's a lurking-place in the Forest here. I should like no better sport, if they'd let me have three or four of the troopers—though I suppose that would be contrary to military etiquette—than to unkennel them with a hound or two."

"You may unkennel one of them without red-coat or hound," cried Dick, suddenly turning his horse against the shoulder of his antagonist's. "Deliver! and go home safely to tell your friends the Justices that you met Dick Turpin."

Mr. Major reined back his horse, for the salute was so sudden that he hardly understood its import; there was, however, no mistaking the look and gesture of Dick. Mr. Major did not lack courage; he dashed aside the presented pistol with the butt of his riding-whip, struck spur into the flank of White-stockings, passed Dick at a single bound, and had cleared some three strides ere our hero could give chase. Turpin had not fired his pistol; indeed, so desirous was he not to do mischief, that its being upon half-cock alone secured it from discharge, when struck aside by Mr. Major.

"Stop—surrender, or I'll fire!" exclaimed Dick.

Mr. Major, relying upon the excellence of his horse, put still more ground between them.

"By gad!" muttered Dick, "I'll be as good as my word. He's best mounted, but he sha'n't escape me!"

He raised his horseman's pistol to his eye, and took as steady aim as his position would permit. A bystander might easily have seen, however, that his practised hand was directed far below the level of the flying rider before him.

White-stockings shrank momentarily as he felt the sharp cut of the ball; but on a hint from the armed heel of his rider, again "laid out."

A trickling stream of sanguine colour showed itself down his fine white shank. Turpin eyed it with a smile. Nevertheless, the horse was doing its utmost, but the mare, Black Bess, not only held her own, but was fast gaining on him; but alas, they were now at Friday Hill, within a mile of Woodford Wells.

Turpin drew his remaining pistol.

"Stop! I warn you!" exclaimed he in a determined tone.

The only reply the fugitive deigned to make to this summons was to place one hand behind him and discharge a pistol without aim.

Dick raised his weapon on a level with his shoulder, but let it fall again, as if hesitating whether he should throw away his last shot.

"I must, or he will escape. I'll chance it!"

Again was a low aim taken; again the sharp crack echoed—the smoke curled along the air—two bounds upon three legs—a sob—an abortive attempt at a

spring—and over fell White-stockings, sending his rider rolling on the road before him.

Dick rode up to Mr. Major. The bullet had taken effect in the hock, and the panting animal lay piteously eyeing his flanks. Mr. Major was on the ground slightly bruised, but by no means seriously hurt, and Dick, keeping an eye on him, quickly reloaded his pistols.

The prostrate gentleman had now recovered his feet, and was about, in his confusion, to make his way to the wounded horse. This, however, Dick prevented, for he doubted not that another pistol remained in the holster.

“Another yard nearer, and I’ll shoot you!” said he.

The half-stunned and smarting gentleman stared at him stupidly.

“Come, quick, hand out—look alive! Your watch I’ll take first, that’s handiest; besides, mine don’t go just now, but I’m sure yours will.”

Mr. Major complied sulkily—he could not relish the jest—and cast a look at the wounded horse.

“Confound it!” muttered he, “I wouldn’t mind my purse, but to lose my White-stockings. Fellow,” said he, turning angrily to Turpin, who, with one hand extended and the other presenting the muzzle of the “little persuader” at his head, sat waiting the delivery of the gold, “you’ve done more mischief than you can mend. I’d gladly give five purses such as this to have saved his life.”

“I’ve no time to argue,” said Dick, looking warily along the road; “though, as we seem pretty much by ourselves, I’ll tell you that I’d the choice between you and your horse, and I seldom miss. Thank my

forbearance it's no worse. White-stockings or yourself—for you will observe I've hit him twice—I'll thank you for the studs from your ruffles, and the clasp from your hat—you must have fallen; I took my choice, and wherever you mention this little affair, be sure to set against your regret for White-stockings the recollection that you owe your life to the forbearance of Dick Turpin." So saying, Turpin clapped spurs to his steed, and an hour after he was riding through London on another horse.

After the robbery of Mr. Major, the country appeared to be thoroughly roused; the country gentlemen took to patrolling the county in bodies, but they soon discontinued this when, in November, hunting of another kind commenced.

An example of Turpin's occasional good-heartedness. He is said to have robbed a farmer of the rents he was carrying to his landlord; he was riding a stout cob when stopped by Turpin. The highwayman rode up to him at a brisk trot, and commanded him to "stand!" The unfortunate fellow did so, not, however, without looking round wistfully for help.

"Your money!" cried Turpin; "look alive, my good man, don't you see you are keeping me waiting?"

"Oh, Lord! oh, Lord!" groaned the unfortunate farmer. "Pray have mercy, good Mister Highwayman, on a poor devil who never harmed man or beast; it's true, gentleman, I have a heavy sum."

"I'll soon lighten you," interrupted Turpin, "so leave off chattering."

"It's my ruin, good gentleman," urged the poor fellow, slowly drawing forth a canvas bag. "Take five or ten pounds, and I may recover the loss, though

it will be hard work with eleven children to provide for, and with such a hard landlord as I have ; there's sixty-seven pounds, gentleman, savings, scrapings, and borrowings, and I'm as good as turned out of my farm if 'tain't paid to-day."

"My friend," said Turpin, "I must *borrow* that bag from you." (The poor farmer's heart fell below his waistband.) "Observe, I say *borrow*."

The word conveyed no comfort to the farmer, for who would dream of a highwayman repaying what he had stolen? To the poor soul it was the wildest fiction that was ever imagined.

"Dost hear?" said Turpin, snatching the bag from the farmer's grasp. "Nay, don't drop your jaw as if you never meant to shut your mouth again. Harkee! 'tis only *borrowed*, I tell ye—that is, if your story's true ; if a lie, then bid good-bye to every farthing. And, hark ye, friend, if you pursue me with a view of recovering your cash, you shall never see a shilling of it again."

The money was delivered up, and the farmer returned home a poorer but a wiser man. Although urged by his wife to do so, he declined to give information against the highwayman, and three weeks after, received back every farthing of his money.

This was somewhat different to the character given to highwaymen in a popular ballad of that day, which was as follows :

Over Hounslow, and Finchley, and Bagshot we're told,
Through the night one might travel in safety of old ;
But so thick now are robbers that 'tis my belief,
For each lord of the manor you now find a thief.

Robin Hood he was famous enough in his day,
But his hand it was open to scatter his prey ;
But the thieves of our times are such covetous elves,
That whatever they get they keep all to themselves.

Turpin, after committing several other highway robberies, was pursued by the officers of justice, and to escape from them he had to set forth on his celebrated ride to York. In a scuffle he and King had with the Bow Street runners before he started on his journey, he by accident shot his old friend and ally Tom King. The shot was intended for the celebrated Bow Street runner Bayes, but in the scuffle that ensued between Bayes and King, Turpin being mounted, the shot miscarried, and entered the breast of King, who immediately afterwards expired. He called out to Turpin to shoot Bayes in order to prevent his being taken ; but in the uncertain light, and the heat and excitement of the scuffle, the bullet intended for Bayes put an end to the life of King. "Fly, Dick," he cried ; "it is all up with me." A shudder, a groan, and the gay, expressive features of the celebrated highwayman had settled into the changeless quietude of death.

"Fifty pounds to the man who stops Turpin," cried Bayes, but Turpin was off and away, whilst the bullets from several pistols whizzed round his head. On he rode through county after county, the shouts of his pursuers (who procured fresh horses in the King's name at each town through which they passed) being often heard by him in the far distance whilst Black Bess held bravely on. He only stopped, when he had distanced his pursuers, to refresh his horse with such stimulants as his long experience of horseflesh could suggest, until, within nine miles of York, the gallant Bess sank down exhausted on the road.

Turpin stood for a while watching her death-struggles. He loosened her bridle, he slipped the bit from her mouth, whilst, with gaping jaws and

wide-strained nostrils, poor Bess panted for breath ; the trembling sinews shook, although the power to rise had gone. Another groan ; she fell back prostrate ; a sob, a gasp, a choking rattle, and blood gushed from her nostrils ; one fond look up into her master's face, and, at last, the heart of the gallant Black Bess was broken.

After the mare had died, Turpin heard a horseman approaching. A few minutes afterwards he was at that horseman's side, crying : "Stand and deliver !" Thereupon Turpin forced the new-comer to dismount. "I shall not take your purse, sir," he said, "but shall require your horse for the day ; to-morrow, if you will pledge me your word as a gentleman not to proceed further in this affair, the horse shall be returned to you."

And, in a few minutes, the favourite hack of Sir W. L—— was seen by its owner galloping away towards York.

Turpin, not content to rest quiet in York, got into a quarrel at a low public-house, and, being marched off to prison, was recognised as the celebrated highwayman.

He was executed shortly after this at York, the year being 1739, and was followed to his grave, at his own particular request, by six young unmarried women, dressed in white, to whom he left sufficient money to purchase what they required for the occasion.

An attempt was made by some body-snatchers to remove his body from the grave, but this was frustrated by a woman who was sincerely attached to him.

Some of these particulars are confirmed by a narrative of his early life, 8vo., York, 1739, in the

British Museum ; but the tales I have narrated above are mostly gathered from the "Life of Dick Turpin," by Henry Miles ; but they describe very well the kind of exploits for which Turpin was famed, and the interruptions to which travellers were subjected when peacefully journeying from one place to another on the King's highway, a little over one hundred years ago.

"Hawke, the noted highwayman, once stopped a gentleman, and bade him stand and deliver ; the latter protested that he had no money to deliver, but that he was flying from his creditors, in order to avoid gaol. Hawke, pitying his unhappy situation, inquired how much would relieve his wants ; he was answered thirty guineas. Hawke then directed the gentleman to go to a house, not far distant, and wait until nine o'clock next morning, and he would bring him something that would relieve him ; the gentleman went, and before the time expired Hawke made his appearance, and presented him with fifty guineas, saying, 'Sir, I present this to you, with all my heart ; wishing you well. Hesitate not, for you are welcome to it.' The generous highwayman having done this, immediately took his leave." *

This was certainly very much to the credit of the highwayman ; but, at the same time, there are few gentlemen who would have cared to profit by it, if they had considered for one moment from whence the money came, and the trouble that the loss of it may have occasioned some unoffending and peaceful traveller.

There is a very ludicrous account in the same book of an attempted robbery :

* "Percy Anecdotes," p. 19.

"It was the custom of Archbishop Sharpe in his journeys generally to have a saddle-horse attending his carriage, that, in case of his feeling fatigued with sitting, he might refresh himself by riding occasionally.

"In his advanced age, and a few years before his death, as he was going in this manner to his episcopal Palace, and was a mile or two in advance of his carriage, a decently-dressed, good-looking young man on horseback came up to him, and, with a trembling hand and faltering voice, presented a pistol somewhere in the direction of the Archbishop's head, telling him to stop.

"His Grace, with great composure, turned round, and, looking steadily at him, desired he would remove that dangerous weapon, and tell him fairly his condition.

"'Sir, sir,' cried the youth with great agitation, 'please, no words; it is not a time for words now. Your money instantly, if you please.'

"'Hear me, young man,' said the venerable prelate; 'come on with me. I, you see, am a very old man, and my life is of little consequence; yours seems far otherwise. I am Sharpe, the Archbishop of York; my carriage and servants are behind. But conceal your perturbations, and tell me who you are and what money you want, and on the word of my character I will not injure you, but prove a friend. Here, take this' (pushing aside the barrel of the pistol with his ungloved hand, and giving him a purse of money). 'And now tell me how much you want to make you independent of so dangerous and destructive a course as you are now engaged in.'

"'Oh, sir,' replied the young man, 'I detest the business as much as you do. I am—but—but—at

home there are creditors who will not wait. Fifty pounds, my lord, would indeed do what no thought or tongue besides my own can feel or express.'

" 'Well, sir, I take you at your word, and, upon my honour, if you will compose yourself for a day or two, and then call on me at —, what I have now given shall be made up to that sum. Trust me; I will not deceive you.'

"The amateur highwayman looked at him, was silent, and went off, and at the time appointed actually waited on the Archbishop, received the money, and assured his lordship that he hoped his words had left impressions which no inducement could ever efface.

"Nothing more transpired of this for a year and a half, when one morning he knocked at his Grace's gate, and, with a peculiar earnestness of voice and countenance, desired to see him. The Archbishop ordered the stranger to be introduced. He had scarcely entered the room when his countenance changed, his knees tottered, and he sank almost breathless on the floor. On recovery he requested an audience in private. This being granted, he said :

" 'My lord, you cannot have forgotten the circumstance of having relieved a highwayman. Gratitude will never suffer it to be obliterated from my mind. In me, my lord, you now behold that once most wretched, most despicable of mankind; but now, by your inexpressible humanity, rendered equal, perhaps superior, to millions. Oh, my lord, 'tis you, 'tis you, 'tis you who have saved me, body and soul; 'tis you that have saved a much-loved wife and a little brood of innocent children, whom I love dearer than my own life. Here, my lord, is the fifty pounds, but

never shall I find language to express what I feel. Heaven is my witness. Your deed itself is your glory, and may Heaven be your present and everlasting reward.'

"The Archbishop, much edified by this peroration, was refusing the money, when the gentleman added :

" 'My lord, I was the younger son of a wealthy man. Your Grace knew him, I am sure. My name is ——. My marriage alienated the affection of my father, who left me to sorrow and penury. My distresses—— But your Grace already knows to what they drove me. A month since my brother died, a bachelor and intestate. His fortune has passed to me ; and I, spared and preserved by your goodness from an ignominious death, am now the most penitent, the most grateful of human beings.' "—

Percy Anecdotes, p. 64.

It is a fortunate thing that the "Percy Anecdotes" are in very small type, or these long-winded stories would occupy volume after volume. This tale of the Archbishop and this singularly timid and delicate-minded highwayman, is extremely ludicrous. It is evident that at the first encounter the highwayman was much more frightened than his intended victim ; I dare say he would have fainted had his pistol gone off by accident. The idea of the Archbishop saying, "Remove that dangerous weapon !" is perfectly delicious ; it puts me in mind of a burlesque, when some trembling fair one wants to know if the sword will go off, and puts her eye to the barrel of the villain's blunderbuss to see if it is loaded. It must be remembered that it was with trembling limbs he approached the Archbishop, and in a faltering voice that he asked him to empty his pockets. The way the venerable prelate tells him to

conceal his perturbations, is delightful ; as though they were something that could be put behind his back or stowed away in the pockets of his tail-coat. Then, when this amateur highwayman (who should have been by rights rocking a cradle, or holding skeins of silk for the women folks of his family, instead of taking to the King's highway) calls on the Archbishop to return him the money, his knees totter, and he sinks breathless on the floor. Tableau, the good Archbishop and the penitent highwayman!!! Act III. Curtain falls.

A hundred years ago, that is at the latter part of the eighteenth century, travelling was neither at its worst nor best, it was just sufficiently on the increase to make the profession of highwayman a very profitable one, until they were captured, and made to expiate their crimes by swinging in the air at Tyburn, or some other well-known place of execution. Previous to 1783, Tyburn was the chief place of execution in London, and a gallows was permanently erected there. In the reign of Henry VIII. the average number of persons executed annually in England was two thousand ; the present number is under twelve.

The gallows at Tyburn, upon which all the highwaymen and other criminals arrested in and around London were hanged, was frequently called Tyburn Tree, because malefactors were at one time hung on the elm-trees which grew on the banks of a small stream called the Tyburn.

Felton, the assassin of the Duke of Buckingham ; Jack Sheppard, the celebrated house-breaker, immortalised by Harrison Ainsworth ; Jonathan Wild, the thief-taker and receiver of stolen goods ; Lord Ferrers, who murdered his steward ; and Dr. Dodd, all died on the Tyburn tree. Dick Turpin would

have done the same had he not been executed at York. Tyburn Turnpike, which stood a few years ago at the southern extremity of the Edgware Road, close to the Marble Arch, was not very far distant from this place of execution. The district round about the Marble Arch is even to this day called Tyburnia, which, as before stated, was in consequence of there being a little stream or tiny bourne just at that spot. Upon one of the elm-trees which grew beside this stream, there was hung Roger de Mortimer, the paramour of Queen Eleanor.

When the humbly born yet distinguished men of the last century set forth from their native places to seek their fortune in the wide world, they must naturally, like other people, have taken the inevitable journey on the road.

In this advanced period of the nineteenth century, this journey, like every other action of their lives, is regarded by us with extreme interest. A certain halo of romance surrounds these travellers upon the journey which was to introduce them to the metropolis, where in after years their names would be so well known. Had they lived in the days of railroads, a very few hours might have been sufficient to waft them from the home of their childhood to the scene of their future operations.

We know that those distinguished Englishmen who lived one hundred years ago, and who had to make their way in the world from small beginnings, and whose hearts were set upon reaching London, where they could satisfy their ambition, must, to attain their object, have journeyed by coach or ridden on horseback, if they did not enter London in that still more humble conveyance, the stage-waggon, or have travelled

upon the nether limbs with which beneficent Providence had provided them. To us living at the present day, it seems almost impossible to believe that so many distinguished men, whose names figure in history, or whom we know only through their biographers, should have flourished and had their being within the short period of one hundred years ago; yet such was the case. There was alive then, Napoleon Bonaparte, who was at the zenith of his power; he did not die until 1821. The man who conquered him, and who was instrumental in his deposition, Arthur, Duke of Wellington, did not quit this world till 1852, and a hundred years ago he was only a lad of nineteen. It is a circumstance worthy of recording, that Bonaparte and Wellington were born on the self-same day and year.

In the year 1788 Nelson was also alive, being at that time only a post-captain; it was not till some years afterwards that he became the distinguished admiral and England's greatest naval hero.

Amongst ecclesiastics were Wesley and Whitfield. The great lawyers of the day were Sir William Blackstone and Sir Samuel Romilly. Poetry was represented by Cowper, Burns, Shelley, and Keats, whilst this period was rich in historians, since there were David Hume, Gibbon, the author of "The Rise and Fall," and Dr. Robertson. Smollett had died in 1771, consequently he did not live within the hundred years, although well within the last century. As for authors of more general literature, Dr. Johnson just escaped living within this period, since he died in 1784. Oliver Goldsmith, too, had not long been dead. Adam Smith, to whom we are indebted for "The Wealth of Nations," was alive; so was Boswell, Johnson's

remarkable satellite. As for philosophers, there were Cavendish, and Herschell, one of the most distinguished astronomers and philosophers of modern times, although perhaps his son, Sir John, has the greatest claim to be universally remembered. I have enjoyed many a happy and contented hour in the library of the Royal Institution poring over his treatises on light, sound, and other works on natural philosophy. There were also Sir Humphrey Davy, whose death did not occur till 1829, and Dugald Stewart, and the two celebrated Scotch physicians, Hunter and Abernethy, whilst Art was represented by the never-to-be-forgotten names of Reynolds and Gainsborough ; in fact, Gainsborough died in 1788, just one hundred years ago. Amongst sculptors might be found Chantrey, Flaxman, and Nollekens, all of whom lived far into the present century. On the London stage might have been seen Kemble and Mrs. Siddons, Quin, Garrick, and Foote having all died a very short time previously. In 1788 lived that great philanthropist, John Howard, whose evidence before the House of Commons, and publications on the prisons of England and Wales, led to their total reformation.

The famous engineers of the period were John Smeaton, constructor of the Eddystone lighthouse, James Watt, Matthew Boulton, John Rennie, Isambard Brunel, and Henry Maudslay.

Invention had also its representatives, since there was John Dollond, the inventor of the achromatic telescope, Wedgewood, the founder of the Staffordshire pottery ware, whilst James Watt, Joseph Bramah, Richard Arkwright, and Dr. Cartwright, contributed their share to the inventions of the age ; but it remained for George Stephenson, in 1814, by the

invention of the locomotive steam-engine, to inaugurate an entirely new mode of travelling, which was to have a greater influence upon the progress of civilisation than any other invention of this or past centuries. But, as I have shown, a hundred years ago, or, in fact, any part of the last century, was the period when coaches were the principal means of travelling; many of the distinguished men I have mentioned must have been in the constant habit of travelling on coaches. Nelson, for instance, may have driven down the Portsmouth road to join his ship, the *Victory*, before starting in pursuit of the French, and immortalising himself by his glorious victory at Trafalgar.

It is by associating in our minds these famous characters of the last century with the road travelling about which this book treats so especially, that we best appreciate the fact of how short a time it is since these celebrated men lived; but if we were to extend this hundred years so as to include the distinguished personages living at the commencement of the last century, we might supplement the list very considerably.

It must not be forgotten that some of the most distinguished politicians England has ever known, a hundred years ago were the leading spirits of the age, since William Pitt's death did not occur till 1806; whilst Burke, Fox, Sheridan, Lord Lyttleton, and Grattan were living considerably into this century.

It has been said that during the eighteenth century England made greater strides in civilisation than she had done during the whole of her existence. Mr. Seeley says this in his "Expansion of England," a clever series of essays; but I certainly should not

think that this was the case. He, very rightly, objects to any particular period being named after a monarch, such as the age of Louis XIV., contending that history should be divided into periods and not into reigns. And this is right enough, since the character of the age is not so much influenced by the sovereign who reigns over a country, or by the Government who rule it, as by the advance made in intelligent thought and the disposition of the people; but the advance made in civilisation by a country is owing to the combined efforts of monarch, Legislature, and people; the people it is who have the greatest influence in such a matter.

The eighteenth century was a century for England of continual warfare. George III.'s reign occupied a very large portion of the latter part of this century, and during his reign there was a great and unending rivalry betwixt France and England.* In addition to this there was war with Spain, and war with America, so that England during that period was scarcely ever at peace. The civil war with America continued eight years, from 1775 to 1783. The reason we were always at war with France was undoubtedly owing to the fact of our contiguity to that country, which brought us into frequent collision with her; we are no further off at the present day—in fact, we are nearer, if we consider the speed with which we can now cross the Channel, owing to the introduction of steam—but, as is well known, mortal enemies who live next door to one another are certain to come to loggerheads, but it does not follow that two friends who reside in such close proximity should remain anything but friends to the end of their natural lives.

* The wars with France lasted for twenty years, from 1744 to the Peace of Paris, 1763.

As for England having made a greater advance in the eighteenth century than in the nineteenth, that is decidedly not the case, as although the nineteenth century is not yet completed, there is not the faintest doubt but what, when it is completed, it will be a period of the very greatest advance in civilisation that has ever been known; but perhaps not, so far as regards conquest, as annexation is generally the result of war. A country who annexes now, either by force of arms and right of conquest, or by diplomatic measures, is called upon by the great Powers of the world to offer an explanation for doing so; and it has been decided by the unanimous voice of the great nations of the world that a balance of power must be maintained, that aggression must be punished, that even colonies that can maintain their own independence should be permitted to make the attempt if they desire to do so, and that annexation is only justifiable where the annexed country is to reap a benefit; consequently the frontier of this nation has not expanded to any considerable extent in this century. The eighteenth century was spent in war, the nineteenth century has been spent more in the establishment of peace and the solidification of the empire.

Although this book is upon Highways and Horses, I am not unmindful of the fact that, when speaking of the advance of civilisation in England, we should remember that it is the nineteenth century that witnessed the invention of the locomotive, and that George Stephenson's invention has left a greater impression upon the civilisation of the world than the distinguished deeds, marvellous performances, and profound wisdom of any other man, however distinguished; and it is a singular fact that such a man

should never have received any mark of favour from his sovereign, and except at Newcastle, and in the Great Northern Railway Station at Euston Square, there is scarcely a statue of him in existence.

There is no doubt about it that the eighteenth century was a period of great men; and it is in that century that the first endeavours were made to improve the education of the lower classes, by the Sunday School system, originated by the benevolent efforts of Robert Raikes, of Gloucester, born in 1735. In the last century, too, the slave trade was abolished.

It is a singular thing that attention was drawn to the condition of the slave trade, by a Latin essay on the subject by the undergraduates at Cambridge, the question being, "*Anne liceat invitos in servitutem dare?*"—"Is it lawful to make persons slaves against their will?" Clarkson, a graduate of St. John's College, carried off the prize; in after years it was he, Wilberforce, Buxton, Brougham, and others, who forced England to blot out from her escutcheon the foul crime of slavery, and brought forward the Act of Parliament which emancipated the negroes.

But I have said enough about the eighteenth century, and I have spoken of it at such length only because it was the period of road travelling, and because, to give the history of roads and of the vehicles that made use of them, without making some endeavour to describe the condition of the kingdom, and to mention some of the famous names of that period, would be like painting a picture and leaving out the background. From the eighteenth to the nineteenth century, we pass, first through a period of slow road travelling, with all the attendant dangers of the road caused by the faulty condition of the laws, which gave

encouragement to highway robbery, then to a period of faster travelling on the road, and lastly, to the time when road travelling ceased altogether owing to the introduction of railways.

Although I call this chapter, "Past and Present," I do not think we need speak much of the present, since we do not now live in the days of road travelling. Yet, before concluding this chapter, I will give an extract from Dickens' "Martin Chuzzlewit," in which he speaks of a fast night-coach, and from Washington Irving's "Sketch-Book;" neither of them were written in the days of highwaymen or indifferent cattle, but at a time when the perpetration of a robbery on the King's highway would have been almost as remarkable as it would be now; and when, so far as regarded four-horse coaches, the word slow-coach had no significance in fact. This description compares favourably with the descriptions of coaching which Dickens wrote during his tour in America. It is as follows:

"The four greys skimmed along as if they liked it quite as well as Tom did; the bugle was in as high spirits as the greys; the coachman chimed in sometimes with his voice; the wheels hummed cheerfully in unison; the brass-work on the harness was an orchestra of little bells; and thus, as they went clinking, jingling, rattling smoothly on, the whole concern, from the buckles of the leaders' coupling-reins to the handle of the hind boot, was one great instrument of music.

"Yoho! past hedges, gates, and trees; past cottages and barns, and people going home from work. Yoho! past donkey-chaises drawn aside into the ditch, and empty carts with rampant horses, whipped up at a bound upon the little watercourse, and held by struggling carters close to the five-barred gate, until the coach

had passed the narrow turning in the road. Yoho! by churches dropped down by themselves in quiet nooks, with rustic burial-grounds about them, where the graves are green, and daisies sleep—for it is evening—on the bosoms of the dead.

“Yoho! among the gathering shades, making of no account the deep reflections of the trees, but scampering on through light and darkness all the same, as if the light of London fifty miles away were quite enough to travel by, and some to spare.

“Away with fresh horses from the ‘Bald-faced Stag,’ where toppers congregate about the door admiring; and the last team, with traces hanging loose, go roaming off towards the pond, until observed and shouted after by a dozen throats, while volunteering boys pursue them. Now, with a clattering of hoofs and striking out of fiery sparks, across the old stone bridge, and down again into the shadowy road, and through the open gate, and far away into the wold!

“Yoho! See the bright moon! High up before we know it!

“Yoho! why, now we travel like the moon herself! Hiding this minute in a grove of trees, next minute in a patch of vapour; emerging now upon our broad clear course, withdrawing now, but always dashing on, our journey is a counterpart of hers. Yoho! a match against the moon! The beauty of the night is hardly felt, when day comes leaping up. Yoho! two stages, and the country roads are almost changed to one continuous street. Yoho! past market-gardens, rows of houses, villas, crescents, terraces, and squares; past waggons, coaches, carts; past early workmen, late stragglers, drunken men, and sober carriers of loads; past brick and mortar in its every shape; and in

among the rattling pavements, where a jaunty seat upon a coach is not so easy to preserve. Yoho! down countless turnings, and through mazy ways, until an old inn-yard is gained, and Tom Pinch, getting down, quite stunned and giddy, is in London. 'Five minutes before the time, too,' said the driver, as he received his fee of Tom." *

Washington Irving published his "Sketch-Book" soon after 1846. Cates speaks of it as a mercantile failure; what he means by that I am unable to say. He certainly cannot mean that it was a literary failure, as it was one of the most popular works he ever wrote, and in England it is certainly the best known of any of his writings. It was written after he visited England, where he lived for some time as Secretary to the American Embassy. In his "Sketch-Book" he speaks of an English stage-coach as follows:

"In the course of a December tour in Yorkshire, I rode for a long distance in one of the public coaches, on the day preceding Christmas. The coach was crowded both inside and out with passengers, who, by their talk, seemed principally bound for the mansions of relations or friends, to eat the Christmas dinner. It was loaded also with hampers of game, and baskets and boxes of delicacies; and hares hung dangling their long ears about the coachman's box, presents from distant friends for the impending feast.

"I could not but notice the more than ordinary air of bustle and importance of the coachman, who wore his hat a little on one side, and had a large bunch of Christmas greens stuck in the button-hole of his coat. He is always a personage full of mighty care and

* Dickens' description is picturesque, poetical, and excellent; but why does he say Yoho?

business, but he is particularly so during this season, having so many commissions to execute in consequence of the great interchange of presents. And here, perhaps, it may not be unacceptable to my untravelled readers to have a sketch that may serve as a general representation of this very numerous and important class of functionaries, who have a dress, a manner, a language, an air, peculiar to themselves, and prevalent throughout the fraternity; so that wherever an English stage-coachman may be seen, he cannot be mistaken for one of any other craft. He has commonly a broad, full face, curiously mottled with red, as if the blood had been forced by hard feeding into every vessel of the skin; he is swelled into jolly dimensions by frequent potations of malt liquors, and his bulk is still further increased by a multiplicity of coats in which he is buried like a cauliflower, the upper one reaching to his heels. He wears a broad-brimmed, low-crowned hat, a huge roll of coloured handkerchief about his neck, knowingly knotted and tucked in at the bosom, and has in summer-time a large bouquet of flowers in his button-hole—the present, most probably, of some enamoured country lass. His waistcoat is commonly of some bright colour, striped; and his small-clothes extend far below the knees to meet a pair of jockey-boots which reach about halfway up his legs.

“All this costume is maintained with much precision; he has a pride in having his clothes of excellent materials, and, notwithstanding the seeming grossness of his appearance, there is still discernible that neatness and propriety of person which is almost inherent in an Englishman. He enjoys great confidence and consideration along the road; has frequent conferences

with the village housewives, who look upon him as a man of great trust and dependence ; and he seems to have a good understanding with every bright-eyed country lass. The moment he arrives where the horses are to be changed, he throws down the reins with something of an air, and abandons the cattle to the care of the ostler ; his duty being merely to drive from one stage to another. When off the box, his hands are thrust into the pockets of his great-coat, and he rolls about the inn-yard with an air of the most absolute lordliness. Here he is generally surrounded by an admiring throng of ostlers, stable-boys, shoeblacks, and those nameless hangers-on that infest inns and taverns, and run errands, and do all kinds of odd jobs for the privilege of battenning on the drippings of the kitchen and the leaking of the tap-room. These all look up to him as an oracle, treasure up his cant phrases, echo his opinions about horses and other topics of jockey lore, and, above all, endeavour to imitate his air and carriage. Every ragamuffin that has a coat to his back, thrusts his hands in the pockets, rolls in his gait, talks slang, and is an embryo coachey.

“ Perhaps it might be owing to the pleasing serenity that reigned in my own mind, that I fancied I saw cheerfulness in every countenance throughout the journey. A stage-coach, however, carries animation always with it, and puts the world in motion as it whirls along. The horn, sounded at the entrance of a village, produces a general bustle. Some hasten forth to meet friends, some with bundles and band-boxes to secure places, and in the hurry of the moment can hardly take leave of the group that accompanies them. In the meantime the coachman has a world of small

commissions to execute. Sometimes he delivers a hare or pheasant, sometimes jerks a small parcel or newspaper to the door of a public-house ; and sometimes, with knowing leer and words of sly import, hands to some half-blushing, half-laughing housemaid an odd-shaped *billet-doux* from some rustic admirer. As the coach rattles through the village, every one runs to the window, and you have glances on every side of fresh country faces, and blooming, giggling girls. At the corners are assembled groups of village idlers and wise men, who take their stations there for the important purpose of seeing company pass ; but the sagest knot is generally at the blacksmith's, to whom the passing of the coach is an event fruitful of speculation. The smith, with the horse's heel in his lap, pauses as the vehicle whirls by, the Cyclops round the anvil suspend their ringing hammers, and suffer the iron to grow cool ; and the sooty spectre in brown-paper cap labouring at the bellows, leans on the handle for a moment, and permits the asthmatic engine to heave a long-drawn sigh, while he glares through the murky smoke and sulphurous gleams of the smithy.

“ Perhaps the impending holiday might have given a more than usual animation to the country, for it seemed to me as if everybody was in good looks and good spirits. Game, poultry, and other luxuries of the table were in brisk circulation in the villages ; the grocers', butchers', and fruiterers' shops were thronged with customers. The housewives were stirring briskly about, putting their dwellings in order ; and the glossy branches of holly, with their bright-red berries, began to appear at the windows.

“ In the evening we reached a village where I had determined to pass the night. As we drove into the

great gateway of the inn, I saw on one side the
of a rousing kitchen fire beaming through a window.
I entered, and admired for the hundredth time
picture of old-fashioned comfort and convenience
kitchen of an English inn. The scene completely
realised 'Poor Robin's' humble idea of the comfort
of mid-winter :

Now trees their leafy hats do bare
To reverence Winter's silver hair ;
A handsome hostess, merry host,
A pot of ale, and a toast,
Tobacco, and a good coal fire,
Are things this season doth require." *

But, speaking of coaches, a writer says that
conveyance which has most interest for us in the
annals of English history is that which spread
news of Nelson's victories and Wellington's victories
strife—the old mail-coach. Its knell began to toll
in 1837, and the final strokes were nearly rung
1853."

We have said elsewhere that gentlemen took
great interest in coaching, but this was not until
pace improved ; then a different order of men
attracted by the art of driving four horses.
Our cousins across the Atlantic are nearly as keen
ourselves in the art of handling the ribbons. On the
26th of May, 1882, eleven coaches belonging to the
New York Coaching Club paraded the Fifth Avenue.
This club numbers now twenty-one members,
seventeen drags.

What we really want, says a writer, speaking of
English amateur coachmen, is a race of young men
who, having thoroughly mastered the technical details

* "Poor Robin's Almanack," 1684.

of driving, shall recognise that too great familiarity with professional guards and coachmen need not form a part of the curriculum. It is quite possible to arrive at the dignity of being a perfect whip without abating one jot of one's character as a gentleman. Those people who believe in nothing but railways and in no coachman except he wear a livery and receive wages, should not be allowed any cause for sneering at those who, with money to spend and disposition and health to enjoy, delight in tooling four well-bred ones over the macadam.

The first man to drive four horses, according to Virgil, was Erichthonius, for he remarks: "Primus Erichthonius currus et quatuor ausus jungerë equos." —*Geor.* III. 113.

Provided that the world continues to exist, notwithstanding the numerous other modes of progression, I am convinced that it will be a very long while yet ere the last coachman will take his seat on the bench of a four-horse coach, or, manipulating his ribbons in a workmanlike style, throws his lash persuasively across the quarters of his near leader, since the love of driving is so strongly implanted in the breast of Englishmen. When this comes to pass, we may then expect to see a New Zealand aboriginal sitting upon Waterloo Bridge in all his war-paint, and viewing, with undisturbed countenance, the oft-foretold destruction of the City of London.

CHAPTER VIII.

AMATEUR COACHING.

Coach-building and harness-making trades—Coaches *versus* covert-hacks—Do foxes like being hunted?—Light coaches—Holland and Holland—All should take their share of work—Amateur coachmen—Mad Mytton—The Four-in-Hand Club—Mr. Morritt, of Rokeby—The Coaching Club—A professional opinion—Randolph Caldecott—Time-bills—Winter coaches—The “Defiance” coach—The Brighton coach—A sale of coach-horses—The “Perseverance”—The “Old Times”—The “Nonpareil”—The “New Times”—The “Defiance”—The “Wonder”—The Brighton coach—Coaching a luxury.

I INCLUDE under the head of amateur coaching all coaching which is not strictly carried on for the purpose of pecuniary profit. Under this heading I denominate coaches placed upon the road for the purpose of reviving, in some measure, the habits of the old coaching days; insomuch as long journeys are undertaken daily by these coaches, seats are booked and paid for, parcels frequently conveyed; whilst the horses are changed at stated intervals, in exactly the same manner as in the days when coaching was a necessity; and yet it is not for the sake of profit, but for pleasure, since no profit can be made sufficient to cover the outgoing expenses.

There is another phase of coaching which I include under the heading of amateur coaching, and this is, the driving of a private coach by gentlemen for the



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COACHING IN HYDE PARK.

conveyance of their family and friends, or for the mere pleasure of driving four horses.

In accordance with these pursuits are the meetings of the Four-in-Hand and Coaching Clubs. These clubs were evidently intended, not only to encourage good coachmanship, particularly in the driving of four horses, but were also intended to prevent the practice of driving a coach from becoming obsolete when the regular coaches were removed from the roads. Had the Four-in-Hand Club not been established, it is very possible by this time that no coach would now be in existence, except such as ran in remote parts of Great Britain, and were never seen in the metropolis; our coach-builders would have forgotten how to build a coach, instead of which coach-building has never been brought to greater perfection. Smartness, strength, and durability are combined in the coaches produced by our best London coach-builders in such a manner as was not dreamt of by the coach proprietors of the old coaching days. Workmen have become more skilled in every branch of the coach-building trade; whilst the productions of the manufacturers and the requisite machinery have improved in like manner. Harness-making, too, has made enormous strides; numberless inventions have been introduced, have proved successful, and have been patented, which have brought both harness and coach as near to perfection as possible.

Having said this much, I think we may now embark on this chapter with a firm persuasion that it will contain some matters of interest to those who feel sympathy with coaching, and regard driving as a healthy and manly exercise for one's muscles, if not for the superior faculties of one's mind.

I see in the *Morning Post* of to-day, Tuesday, August 30th, 1887, the following paragraph :

“THE GUILDFORD COACH.—This well-known coach, called ‘The New Times,’ which has been running between ‘Hatchett’s’ Hotel, Piccadilly, and the ‘Angel’ Hotel, Guildford, has now stopped, and the horses will be sold by Messrs. W. & S. Freeman, at Aldridge’s. This coach was one of the best horsed of the season, and has been mostly driven by its owner, Mr. Walter Shoolbred. There are altogether twenty-nine horses to be sold.”

It is a strange thing that this coach should have ceased running so soon, as the best times for coaching are undoubtedly the spring and autumn ; during such a hot summer as we have lately experienced, driving daily along the dusty roads in the hot sun must have been very trying to the horses, and very unpleasant for those who were seated on the top of a coach ; consequently it is a strange thing that, directly the weather became cooler, and the dust was laid by a few heavy showers, the Guildford coach should have ceased running, and have been taken off the road, which is one of the prettiest anywhere out of London. This year there have been a great number of coaches on the road, about which I will presently speak.

There is no doubt that there are just as good coachmen now as there were in the old coaching days ; besides which, coach-building has greatly improved, harness is better made, and far lighter and neater in appearance than it used to be. The coaches that leave the White Horse Cellars and the “Grand” and “Métropole” Hotels, before emerging from London, have to traverse thoroughfares far more crowded and dangerous to navigate successfully with a well-bred

team than in the old coaching days, when there were fewer inhabitants and less traffic.

Some of the coaches which run from the White Horse Cellars, run during the winter, a singular thing for them to do, particularly in the case of the "Oatlands Park Hotel" coach ; this hotel in the depth of winter cannot be a very cheerful place in which to stay. I cannot imagine a Londoner venturing on the top of a coach on a bitterly cold winter's day, merely to be deposited at the end of his journey at a place which can offer no attraction whatever as a winter residence, and is only enjoyable in summer because of its garden and proximity to the Thames.

If coach proprietors are inclined to run well-appointed coaches during the winter, they should do so in the hunting counties from the principal towns, in which case they would be certain of a coach-load to the more distant fixtures, as hunters could then be sent on early in the morning, and their owners might dispense with the services of a hack, and need not take their own carriage to the meet ; the grooms might return on the coach in charge of their master's overcoat and wraps. A good coach, well horsed, with a decent coachman, would under such circumstances be a welcome addition to the conveniences of such renowned hunting centres as Melton, Market Harborough, Oakham, Rugby, and Leamington ; besides which, a coach at Bletchley or Leighton Buzzard, on the L. & N.W. line, would be of considerable service, as a number of men hunt from these two last-mentioned places, coming down from London by rail, and returning again to town in the evening ; consequently they are not in the habit of keeping a carriage of any kind to convey them to the meets. Driving to meets of hounds economises one's

strength, as a long ride on an indifferent hack, and even on a good one, must exhaust some of the strength and energy with which one started.

I think a great deal of rubbish has been written about the decline of coaching, yet I am of opinion that the revival of coaches on the road during the summer months is a very sensible way of providing people with amusement, and enabling them to take pleasant drives through a picturesque country; and there is no objection whatever to gentlemen of rank and birth putting these coaches on the road and maintaining them in good style, occasionally driving themselves; but I do not think it is wise to make a daily practice of driving a public coach. The result of such a practice would not, I feel certain, improve a man's mind; at the same time, there is nothing degrading in such a practice. As for driving one's own private coach, it is as innocent a pastime as yachting; the sport, if it can be so called, is of the most inoffensive description—far more so than racing, which frequently brings one into contact with persons of questionable character. Some persons, with far-strained ideas of what is cruel, denominate hunting and shooting as cruelty to animals; but those who so regard those two sports, one of which is called the sport of kings, can surely have no such charge to make against coaching; consequently, gentlemen who drive four horses have the satisfaction of knowing that in the breast of no one whom they pass on the road do they raise a storm of indignant protest; besides which, when driving, the same as when yachting, they give pleasure to others besides themselves. As regards hunting being cruel, the following reply was made to this accusation:

"We know the men like it, the horses certainly like it, and we have no proof that the fox does not like it." He very probably does enjoy himself on a cold scenting day when the hounds cannot hit off his line; then probably, as he sneaks away down wind, he turns round to make grimaces at his pursuers; but I cannot imagine that he experiences much pleasure when he is chopped in covert, or feels that the leading hounds are close to his brush, and that a funeral sermon will very soon be preached over his remains.

As regards driving, cruelty can only exist when the horses are made to perform work beyond their powers, or made to labour when out of condition, or suffering from disease, or from wounds or sores occasioned by ill-fitting harness, or when the driver loses his temper and strikes a horse without necessity, or is not sufficiently patient with the animals committed to his care; but these things would not be likely to occur with four-horse coachmen.

In regard to driving coaches, these vehicles are made excessively heavy. In the old coaching days this was necessary, as they had to journey over very bad roads and met with all sorts of accidents; but this is not the case now, and there is no reason why, in order to obtain the style of an old-fashioned four-horse coach, modern coaches should be made so heavy. Modern coaches are rarely in use except in the summer-time; if they travel at all it is over good roads, they rarely, if ever, meet with accidents, neither are they so heavily loaded; consequently coach-builders of the present day should aim as much as possible at lightness of build in combination with strength, durability, and characteristic appearance.

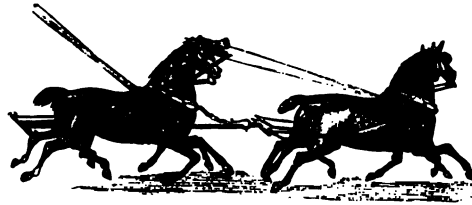
If any complaint can be made against four-in-hand

coachmen with regard to ill-treatment of horses, it is that coaches are too heavy ; a couple of elliptic springs taken from a full-sized four-horse coach appear to me to be as heavy as an entire carriage of the lightest class, such as a T cart or Stanhope gig. Yet it is a well-known fact that a coach upon which so many people ride must be strong in proportion to the weight it has to support, and that the stronger it is made, the longer it will last and the safer it will be. Notwithstanding this, there have been many complaints about the weight of coaches ; letters have frequently been written to sporting papers on the subject. A gentleman wrote some time ago to the *Field* ; his letter appeared about May 6th, 1882, in which he says :

“ I was a guest on the first trip of the Dorking coach this season.” He then asks : “ Why all this cumbrous machinery for carrying over our well-made roads a few gentlemen who might be packed in a one-horse waggonette ? ” He goes on to say : “ It is a coach-maker’s hobby. Eighteen months ago I was a guest of a well-known baronet in the North of Wales, during which I had the pleasure of the most glorious and enjoyable rides over the Welsh hills I ever had in my life. The coach was but fifteen hundred-weight, and was a marvel of symmetry and comfort. The light horses of the district were able to take it over the hills with the greatest ease, and there was a marvellous elasticity about it entirely unlike the ordinary coaches to which I had been accustomed. Perhaps it should be stated—as I was informed—that the builders, Morgan & Co., a well-known firm in Long Acre, claim a patent for this little coach. Anyhow, the fact remains that coaches should not be the cumbersome things they now are ; and the sooner



A LIGHT MORGAN COACH, WITH LUNCHEON BOX ON ROOF, HORN CASE,
SPARE LEADERS' BARS BEHIND GROOM'S SEAT, BASKET FOR STICKS
AND UMBRELLAS, LIGHTHOUSE SIDE LAMPS, SKID AND BREAK.



LIGHT FOUR-HORSE HARNESS, AS IT SHOULD BE—NO BEARING-REINS,
LOOSE POLE-CHAINS.

[To face page 325.]

coach-builders recognise the fact that the old style of coach, in which few improvements can be claimed during the present century, the better for their reputation.* The drive on a four-in-hand through the country would be infinitely more enjoyable if we knew that the powers of the willing horses were not unnecessarily taxed."

This letter was signed "Four-in-Hand," and was followed by a number of letters on the same subject, written by men of some experience. One remarks that "coaches themselves, unloaded, are quite sufficient to tax the powers of any team; but with a full load of passengers they are simply killing to the poor horses." This gentleman goes on to speak of the light coaches running in the Lake districts, which, he says, are built by Mr. Rigg, of Windermere. Captain Hargreaves, who once ran the London and Portsmouth coach, drove one of these coaches daily from Windermere to Keswick, and was so pleased with their lightness and easy-running qualities that he ordered one for himself in the South. This writer, after making some rather foolish remarks about our London coach-builders taking a lesson from Mr. Rigg, of Windermere, concludes his letter by signing himself "Four-horse Whip."

This letter was followed by another, which mentioned the late Captain Cooper, who, it will be remembered, owned a beautiful place called Pain's Hill, near Esher. He, for some time, had the London and Boxhill coach, when driving which he had a bad accident, the pole having broke. He got a coach by Wand, of the Old Kent Road, and had it copied by modern firms. In this coach iron was almost done

* This writer is mistaken in supposing no improvements have been made; there have been numerous improvements made in coaches of late years.

away with, and the timber was increased in proportion ; nevertheless, it weighed twenty hundredweight. This writer goes on to speak about doing away with the perch, but in that case the vehicle would no longer be a coach. He further remarks that it is not essential, in order to maintain the ancient glories of the road, to draw a vehicle of twenty-four hundredweight just because it is a particular shape. He says that the quidnuncs at Hatchett's would be dreadfully shocked were four horses driven in anything but a coach. This entertaining writer signs himself "Quaint Bits ;" and with a few more remarks from other writers, this newspaper controversy was concluded.

Mr. V. Kesterton, who is the proprietor of Messrs. Holland's coach-building establishment in Oxford Street, has sent me the following answers to questions I asked of him respecting coaches ; and he must naturally have great experience, when one considers that, as regards the building of four-horse coaches, Messrs. Holland are unrivalled ; in fact, they have made the building of four-horse coaches their speciality.

I asked him what was the weight of a full-sized four-horse stage-coach, such as would be used for carrying a number of people with heavy luggage. His answer was twenty-two hundredweight.

Question : What is the weight of a full-sized private coach ?

Answer : Nineteen hundredweight.

Question : What is the weight of the smallest coach made ?

Answer : Seventeen and a half to eighteen hundredweight.

These were the questions and answers which passed between myself and Mr. Kesterton; and though I admit that a coach weighing twenty-two hundred-weight, loaded with passengers, is too heavy for any coach-horses except the very strongest of their kind, yet no one can complain when a coach does not exceed eighteen hundredweight. Yet where there is smoke there must be fire, and there is undoubtedly some truth in the complaints that have been made as to coaches being too heavy, but to do away with the perch, as one of these correspondents suggests, would alter the character of the whole carriage. Mr. Kesterton in writing to me remarks, that "a coach without a perch is no coach at all, only a four-wheel carriage. A perch prevents the pole from being unsteady, prevents it chucking, as in a coach with a perch the pole is under the springs, and not above them. The perch gives greater strength and assists the draught, as it connects the front and hind carriage; it would, therefore, never do to dispense with it, as suggested by the *Field* correspondent."

Speaking of the coaches in the Lake districts, whatever they may be as regards build, I can bear testimony to their being remarkably well driven. I spent some time in the Lake districts a couple of years ago, and was surprised at the skilful, and I may almost say reckless way in which they were driven. It is not always the best appointed coach which is best driven; there are many coaches throughout England that are badly appointed, badly horsed, yet well driven, coaches upon which one might hesitate to be seen; and yet there is no doubt that when a gentleman takes to driving, in many cases his superior intelligence is the means of making a better coachman of him than

would be the case with a servant, or some one in a lower class of life. One thing in his favour is that he has lighter hands—this is the result of his never having done hard manual work of any kind ; in fact, a man who wrote a great deal, or an artist, sculptor, or engraver, were he to engage in hard manual labour, would soon lose his delicacy of touch ; even were he to row or do anything requiring a continuous use of the muscles of his hands, his touch would be impaired. It is on this account that ladies have such good hands, and by their delicacy of touch can manage a restive horse when with a man he would probably run away. Grooms have always bad hands ; I never knew yet a gentleman's servant who could drive really well. There is a tale told of some gentleman whose horses always pulled when driven by his coachman, simply because he pulled at the horses. In order to convince him that he was wrong, the gentleman tied a rope to an iron post, and placed the end of the rope in the groom's hands. "Now pull," said he, and the groom pulled. "Do you feel it pulling?" said the gentleman. "Yes," replied the groom. "Now slacken it off; does it pull now?" "No," answered the groom. "Now, you fool," said the gentleman, "that post is like your horses; if you don't pull at them, they won't pull at you."

The above remark is very true ; horses with good mouths are often spoilt by grooms with bad hands. It must always be remembered that riding and driving is like married life, one must give and take ; it is only upon this principle that a horse and his rider can get along comfortably. Of course, a great deal depends upon the way a horse is bitted. I would not recommend any one to use severe bits, even with a horse that

pulled, as a severe bit often makes a horse pull, when with a mild one he would go perfectly easily and quietly. When in a team of four horses there is a refractory animal, the best thing is to bit the other three horses, so that you may keep them well in hand, whilst you let the pulling horse take charge of the coach; he will soon get tired of this, and a few miles along a stiffish road will bring him to his senses, and make him trot quietly with the rest of the team. This can easily be done by loosening the traces of the three temperate horses you have under perfect control, and either tightening the traces of the pulling horse, or allowing them to remain as they are; in either case, the labour of drawing the coach will come almost entirely upon him alone, and no horse in the world, however much he wishes to run away, can do so with a ton weight tied to his heels.

Very often with an indifferently driven coach, it may be observed that with light-mouthed horses on level ground, or up a very slight incline, the leaders are in hand—that is, they are not let out to the full extent of their traces—consequently they are not contributing their proper share of labour to the drawing of the coach. When this is the case, it is the two wheel-horses who are dragging the coach along; consequently those persons who complain that a heavy four-horse coach is too great a load for four horses, would be still further distressed were they to consider how many amateur coaches, driven by inexperienced coachmen, are actually drawn over the greater part of their journey by the two wheel-horses, whilst the leaders do not contribute in any way to the progress of the vehicle.

Amateur coaching is not altogether a thing of the

present day. In the old coaching days, very many gentlemen used to drive the public coaches.

Captain Barclay it was who, for a bet, drove the mail right through from London to Aberdeen, and then offered to drive the London mail back, but Lord Kennedy, who made the bet with him, did not care to renew it.

A Mr. Stevenson, a graduate of Cambridge, horsed and drove a coach called the "Age," which ran to Brighton; his passion for the bench got the better of all his other ambitions, and, as Nimrod says, "he became a coachman by profession. He died very young; but not before he had arrived at perfection in his art. His education and early habits had not, however, been lost upon him; his manners were those of a gentleman, and it may fairly be said of him that he introduced the phenomenon of refinement in a stage coachman. At a certain change of horses on the road a silver sandwich-box was handed to his passengers by his servant, accompanied by the offer of a glass of sherry to such as were so inclined."*

Nimrod goes on to say: "Well-born coachmen prevail on this road. A gentleman connected with the first families in Wales, and whose father long represented his native county in Parliament, horsed and drove one side of the ground with Mr. Stevenson; and Mr. Charles Jones, brother to Sir Thomas Tyrwhit Jones, had a coach on it, called the 'Pearl,' which he both horsed and drove himself.

"The Bognor coach, horsed by the Messrs. Walkers, of Mitchel Grove, and driven in the first style by Mr. John Walker, must also be fresh in the recollection of many of our readers; and Sir Vincent

* Nimrod evidently considered that the production of this sandwich-box and glass of sherry was a convincing proof of good breeding.

Cotton, one of our oldest baronets, now drives the 'Age,' having purchased it of Mr. Willan, who drove it, and who now drives the 'Magnet' on the same road."

When the old coaches were taken off the roads, and railroads were established, the fancy for driving four horses appeared evidently on the decline ; in fact, before this it occupied much attention amongst the best classes of society.

Nimrod says : "Taken in moderation, we can see no reason to condemn this branch of sport more than any other. Even in ancient days the Athenians, the most polished nation of all antiquity, deemed it an honour to be considered skilful charioteers. Why, then, should Englishmen consider it a disgrace ? To be serious, our amateur or gentlemen coachmen have done much good. The road would never have been what it now is, but for the encouragement they gave, by their notice and support, to all persons connected with it. Would the Holyhead road have been what it is, had there been no such persons as the Hon. Thomas Kenyon, Sir Henry Parnell, and Mr. Maddox ? Would the Oxford coachmen have set so good an example as they have done to their brethren of 'the bench,' had there been no such men on their road as Sir Henry Peyton, Lord Clonmell, the late Sir Thomas Mostyn, that Nestor of coachmen, Mr. Annesley, and the late Mr. Harrison, of Shelswell ? What would the Devonshire road have been, but for the late Sir Charles Bamfylde, Sir John Rogers, Colonel Prowse, Sir Lawrence Palk, and others ? Have the advice and the practice of such experienced men as Mr. Charles Buxton, Mr. Henry Villebois, Mr. Okeover, Sir Bellingham Graham, Mr. John Walker. Lord Sefton, Sir Felix Agar, Mr. Ackers, Mr. Maxse,

Hon. Fitzroy Stanhope, Colonel Spicer, Colonel Sibthorpe, *cum multis aliis*, been thrown away upon persons who have looked up to them as protectors? Certainly not; neither would the improvement in carriages—stage-coaches more especially—have arrived at its present height, but for the attention and suggestions of such persons as we have been speaking of.

“The fashion, however, was not one of venerable standing among us—gentlemen coachmen not having been known in England for more than about half-a-century. We believe we ourselves remember the Anglo-Erichthonius—the late Hon. Charles Finch, brother to the late Earl of Aylesford, who used to drive his own coach-and-four, disguised in a livery great-coat. Soon after his *débüt*, however, the celebrated ‘Tommy Onslow,’ Sir John Lade, and others, mounted the box in their own character. Sir John was esteemed a renowned judge of coach-horses and carriages, and a good coachman of the old school; but everything connected with the coach-box has undergone such a change in the last twenty-five years, that the Nestors of the art are no longer to be quoted. Mr. Warde, the father of the field, may now, we believe, be called the father of the road also; and if the old heavy Gloucester ‘six inside and sixteen out, with two tons of luggage,’ were to reappear on the road, no man’s advice would be better than his.”

John Mytton, of Halston in Shropshire, was born on the 30th of September, 1796, and when he came of age inherited an enormous fortune, which he did his best to dissipate; he became widely known by his eccentric and extravagant exploits. We do not hear much of his driving a four-in-hand coach, but he was a great tandem driver, and on one occasion was actually

foolish enough to drive across country by moonlight ; and yet it was universally acknowledged that Mytton was no coachman, although he drove so much. On one occasion, when he was dining out, and the conversation turned on the danger of driving tandem, with which team he had driven out to dinner, Mytton at once expressed his dissent from this doctrine, and offered to bet a pony (£25) all round that he would that night drive his tandem across country into the turnpike road, a distance of half-a-mile, having, in his progress, to get over a sunk fence, three yards wide, a broad, deep drain, and two stiff quickset hedges, with ditches on the opposite side. The bets offered were taken by several men who were present, to the amount of £150 and upwards. After the necessary preparations, all turned out to see the performance ; although, as Mytton was under age, he was strongly persuaded not to make the attempt ; these admonitions naturally, however, had a contrary effect, and, twelve men with lanterns attached to long poles having been procured, to supplement the light of the moon, at the appointed signal away went Mytton and his tandem across country.

The first obstacle was the sunk fence, into which, as may be expected, he was landed ; but the opposite side being a gradual slope, the carriage and the lunatic who sat in it, by applying the lash to the horses, were drawn out without injury. He next sent his horses at a wide drain, and such was the pace he went at it that it was cleared by a yard or more, but the jerk sent Mytton flying on to the wheeler's back ; but he somehow managed to resume his seat, and took the two remaining fences in gallant style, after which he got safe back into the turnpike road, and, pocketing the money he had gained, drove away home.

In fact, Mytton, if we are to believe all that Nimrod says of him, was in the constant habit of driving his gigs over fences whenever he was resolved upon a short cut to avoid going round; and although he frequently surmounted the obstacle without injury to horse, cart, or driver, he had an incredible number of accidents. In fact, he was a perfect lunatic, and Nimrod's only object in writing his life must have been to chronicle his marvellous escapes.* When he drove his phaeton up to the door at Halston, instead of letting a groom drive it round to the stables, he would start the horses off by themselves at a gallop, and, strange to say, they conducted the carriage safely into the yard, although they had two rather sharp turns to make and one gate to go through. He was fool enough on one occasion to drive a tandem at a turnpike gate. It happened as follows:

Having bought a horse of a dealer named Clark, of Meole, in Shropshire, he put him into a gig as leader in a tandem, and took the dealer for a drive. Upon approaching a turnpike gate, which was closed, he asked the dealer who sat beside him if he thought the new purchase was a good timber-jumper. Upon the dealer expressing a doubt, Mytton said, "Then we will try him;" and seeing the turnpike gate, he gave the horses their heads, and galloping straight at the gate the leader cleared it in beautiful style, leaving Mytton and the dealer and the wheel-horse fortunately all alive, although on the wrong side; the gig, out of which the dealer was sent flying, was a good deal knocked about.

* The elder Alken illustrated Nimrod's "Life of Mytton," and although Mytton did nothing worthy of biographical notice, Alken's sketches are so remarkably clever and spirited that they make the book interesting solely on that account.

On one occasion Nimrod was driving with Mytton, they were both going out to dinner, for which they were late ; having taken a wrong turning on approaching the house, they found themselves in a field from which there was no egress, except by the gate through which they had entered. "We'll manage it," said Mytton ; "this horse is a capital fencer, so do you get over the fence and catch him." The fence was a stiff hedge, with a ditch on the other side. He then unbuckled the bearing-rein, gave the horse a sharp cut with his whip, and over he came, gig and all, without the slightest accident. One day, when taking some friends round his stable at Halston, he said that he had something still better worth seeing than his horses ; and opening his coach-house doors he thus addressed them : "You see that gig : last night it was carried clean over my lodge gates, and, as you will observe, is not a bit the worse for it, neither is the horse which you saw in the stable."

Nimrod says this was a marvellous performance, as it certainly was ; but that the inhabitants of the town of Wrexham, in Denbighshire, can well remember a somewhat similar circumstance occurring at a villa close to that town, some twenty years back. A horse, the property of the late Mr. Watkin Hayman, ran away with a gig from his front-door, and carried it over a high palisade gate, without injury to either himself or the gig. Nimrod says he went next day to see the gate ; the only impression left upon it was the fracture of one of the spikes or points of the top rail.

Mytton naturally caused his friends some apprehension, and Nimrod says that he never entered a carriage with him without first making him promise not to drive or touch the whip or reins. On one occasion he was driving a friend in a gig, when Mytton, without

any prefatory remark on the subject whatever, said :
“Were you very much hurt, then, by being upset out of that gig?”

“No, thank God!” said his companion, “for I never was upset out of one.”

“What,” replied Mytton, “never upset out of a gig? What a d—— slow-coach you must have been all your life!” and running his wheel up the bank, over they both went, fortunately without either being much hurt. But Nimrod says that Mytton was really no coachman, he knew nothing of the actual science of driving four horses; he would, however, now and then drive the Holyhead mail, but when he did so, he never attempted any larks.

Forty years ago the late Sir Henry Peyton, a member of the Four-in-Hand Club, a famous whip in those days, elicited from Will Bowers, the well-known Oxford coachman, the following clear and conclusive criticism on the difference between locomotion by rail and by road :

“Why, you see, Sir Henry,” said Bowers, “if an accident happens to a coach, why, there you are; but if an accident happens to a train, where are you?”

In the early days of railroad travelling, even the Four-in-Hand Club appeared to languish, and there were many men of that generation who predicted with great emphasis that the days of all coach driving were doomed; but that these birds of ill-omen were wrong, is proved by the flourishing condition of the Four-in-Hand and Coaching Clubs, not to mention the revival coaches, which, I think, is the best term to apply to those coaches which have of late years been put on the road during summer. At all the great race-meetings, too, such as Epsom, Ascot, Goodwood, and Sandown, the dis-

play of coaches will satisfy any one that coaching has not yet become a thing altogether of the past.

The Four-in-Hand Club is now in better form than ever ; the Committee, in 1878, consisted of the Duke of Beaufort, the Duke of Sutherland, the Marquis of Londonderry, the Earl of Sefton, the Earl of Macclesfield, Lord Londesborough, Lord Wenlock, and Lord Aveland. The Duke of Beaufort is the President ; there were over fifty members, amongst whom the following names may be mentioned : Colonel Dickson, Sir Henry Tufton, Sir Henry Meysey-Thompson, the Marquis of Waterford, Sir T. Peyton, Lord Abingdon, Lord Haldon, Count Munster, Mr. Adrian Hope, General Owen Williams, the Earl of Bective, Lord Charles Beresford, the Marquis of Blandford, Mr. Henry Chaplin, Lord Cole, the Earl of Craven, Mr. W. G. Craven, Mr. Eaton, Lord Hemsley, Sir John Lister Kaye, Lord Macduff, Lord Muncaster, Sir Roger Palmer, Sir George Wombwell, the Marquis of Worcester, and Mr. C. Birch Reynardson, the author of an amusing book called "Down the Road," which was lately published by Messrs. Chapman & Hall.

The Four-in-Hand Club generally meets in Hyde Park twice during the season, and drives to some place out of town, where the members and their friends dine, and return late in the evening. I have witnessed a great many meets of the Four-in-Hand Club at the Magazine in Hyde Park, but I do not intend to enumerate them all, or to attempt to describe the appearance of the various coaches and their teams, since the correspondents of the various sporting papers are so active in this particular branch of literature, except to say that both the coaches and horses belonging to the Four-in-Hand Club are well turned out, and

the horses are generally well-bred and a good-looking lot ; but from what I have seen of the many meets of the Coaching Club which have been held during the two past seasons in Hyde Park, I cannot extend to them the same amount of praise : a more indifferent-looking lot of horses it has rarely been my lot to behold. Before the Four-in-Hand Club was established there were many other driving clubs, but when driving four horses not attached to the mail or stage-coaches, it was frequently the habit to make use of a barouche with a high driving seat, and a rumble behind for the two grooms.

A correspondent of the *Sporting Gazette* of the 5th of June, 1880, speaks as follows of a meet of the Four-in-Hand Club at the Magazine in Hyde Park :

Two-and-twenty was the number—a much larger one than expected—whom Lord Aveland, in the absence of the Duke of Beaufort and Lord Carington, led off down the drive. The Crystal Palace for luncheon was the supposed destination of the club ; but of course there was the usual falling out, and a great many “scratched” at Hyde Park Corner and in Belgrave Square. It is long since either club has mustered in any numbers at the Crystal Palace, the horrors of the tram having acted as a deterrent to many coachmen. In the early days of the C.C., and when afternoon meets were the fashion, there were one or two very pleasant dinners at the Palace—and an awkward place to get away from it was after dinner, we remember—but these gatherings seem of the past. We are inclined to regret this. We all know what cohesive and cementing powers there are in a dinner. Both the Four-in-Hand and the C.C. are clubs without a local habitation, and to meet twice a year or so at a particular spot in the Park is all that they do to keep up the club idea and the name. We are not for a moment believers that coaching will suffer because coachmen do not dine ; but yet it is just possible that that thoroughly English institution, a dinner, might help to keep the fire aglow, and, supposing such a necessity should arise, rekindle the fading embers. We beg to submit the idea to the noble presidents and vice-presidents of both institutions.*

The Coaching Club meet on Wednesday, June 16, and drive to Hurlingham for luncheon.

* Since this letter appeared the Badminton and Road Clubs have been established.

The above is evidently written by a correspondent who forgets that the members do dine together after the meets in the Park.

On June 17th, 1882, the first meet of the Four-in-Hand Club for that year took place at the Magazine in Hyde Park, and is described as follows in the *Sporting Gazette* of June 20th :

The first meet of the Four-in-Hand Club was held at the Magazine on Wednesday at 12.30 p.m., and, favoured by the presence of Royalty and splendid weather, the sight was one of the prettiest that is ever seen during the London season, albeit the muster of coaches, numbering only fourteen, was a sad falling off from last year's parade or of that of the junior club, the Coaching Club, which was held last Saturday. The Duke of Beaufort, the president of the club, although the last to arrive on the scene, soon worked his good-looking coaching team to the front and took the post of honour. Lord Arthur Somerset was on the box seat, but relinquished in order to pilot the regimental coach of the Blues, which had been driven to the meet by Lord Kilmarnock. The time of starting having arrived, the president led the way, followed by Lord Aveland (browns), with the Prince of Wales on the box seat ; and then came Lord Londesborough (browns), Count Munster (chestnuts), Sir H. Meysey-Thompson (browns), Marquis of Waterford (greys), Mr. Adrian Hope (browns), Mr. Chandos-Pole (chestnuts), Duke of Portland (blacks), Lord Cole's coach, driven by Colonel Chaplin (bays) ; 1st Life Guards, driven by Captain Spiar (chestnuts) ; Royal Horse Guards' coach, driven by Lord Arthur Somerset (bays) ; Lord Hothfield (blacks), and General Dickson (browns and bay). They drove round by Hyde Park Corner to Queen's Gate, where the procession broke up, a few coaches going to Hurlingham, the remainder returning to the Park.

There have been many more recent descriptions, both in the *Field* and the *Sporting Gazette*, of these meets of the Four-in-Hand and Coaching Clubs, but the ones which I have given will serve my purpose. There is no novelty whatever about them : a certain number of gentlemen driving a certain number of coaches meet in Hyde Park to drive to a certain place ; all the fashionables who are in London flock to the Park to see them ; very probably Royalty is present, the Prince and Princess of Wales frequently attending

these meets ; after driving round the Park many of the coaches go home, to be seen no more.

The Coaching Club is a far more recent institution, and cannot lay claim to quite the same exclusiveness as the Four-in-Hand Club, as has been explained. The only club-houses or places at which the members of these two driving clubs can meet and discuss coaching are the Badminton and Road Clubs. There should also be a club for hunting men, more particularly for Masters of Hounds, where they might meet and discuss matters relating to hunting, the distribution of their countries, and all matters relating to the well-being of the chase.

As I have before said, there were driving clubs even before the time of the Four-in-Hand Club. In Dickens's "Dictionary of London," "the Benson Driving Club is said to have been established in 1807 and broken up in 1854. It consisted of twenty-five members, and was the last of the old coaching clubs known to the past generation ; as the Four-horse Club, which was organised a year later, expired in 1826, and the Richmond Driving Club did not last long."

In the old days there were a number of country squires, noblemen, and persons of less degree, who took shares in horsing fast coaches for the mere privilege of driving them, such as the celebrated Captain Barclay of Ury. Driving four-in-hand became the fashion towards the end of the last century, when George, Prince of Wales, extended to it his patronage; not that the Prince drove four-in-hand himself, the team in his travelling barouche consisted of six horses, four of them in hand, whilst the two additional leaders were ridden by postillions. In those days the Pavilion at Brighton was full of guests, the Steyne was crowded

with all the smartest people in London, and Brighton and Lewes races were then most fashionably attended. The Race-course was crowded with handsome carriages; the Prince of Wales' German waggon (for so barouches were called in those days) was drawn by six bay horses; when it arrived at the race-course it took up its station close to the grand stand, where it remained the centre of attraction during the day. Sidney says that, "for a time a solitary representative of the coaching interest was a rough-looking man driving every day through the suburbs* in all weathers; he drove four useful, rough-looking gray horses, harnessed to what had the appearance of a mail-coach, except that there were no names or coat-of-arms on the panels. The omnibus drivers, who were then for the most part broken-down knights of the road, of amazing four-horse fame, declared that this man was bound, under penalties in his father's will, to drive four horses a certain number of miles every day."

It was in 1856 that the late Mr. Morritt, of Rokeby, succeeded in getting together thirty good men and true, who had a passion for driving, and established the Four-in-Hand Driving Club, of which he became the president; each member was entitled to wear a brown coat bearing the club buttons. Since then a furious revival has taken place, and the services of the professional survivors of the coaching era have been in constant demand. But the Four-in-Hand Club was, after a time, found to be too exclusive for the increasing taste for the road; and in 1870, Mr. Goddard and a few other gentlemen established the Coaching Club, which, on its very first appearance in Hyde Park, turned out twenty-two drags, and in

* Of London.

1879 the list of members (confined to one hundred) was full, whilst many applicants for election were upon the books.

Both clubs meet twice a year, and generally at the Magazine in Hyde Park, though the Four-in-Hand Club do sometimes meet on the Horse Guards Parade-ground in the Green Park. The Four-in-Hand Club's first meet is always on the Wednesday before the Derby. The members of these clubs after the meet is over generally drive to Greenwich, Richmond, the Alexandra or Crystal Palaces, the Orleans Club, Hurlingham, or some convenient place at which to dine; the Orleans Club has for some time past been wound up, but it used to be a very favourite rendezvous for the coaches. In 1874 Major Furnival opened the Road Club in Park Place, and Mr. Herman very shortly after this established the Badminton Club at 100, Piccadilly, where there is capital stabling for fifty horses. The Road Club keeps a coach for the use of its members during the season, and the Badminton has always one or two teams, with a coach, brake, etc., in the yard. The Duke of Beaufort is president of both these clubs, as he is also of the Four-in-Hand and Coaching Clubs.

I give an extract from a report that appeared in the *Sporting Gazette*, during the summer of 1881, with regard to a meet of the Coaching Club. This correspondent says that "on this occasion, Count Munster, the German Ambassador, and a very enthusiastic coachman, was about the first arrival; he was soon followed by Captain Bill and Major Dickson, the latter driving the coach of the Badminton Club, which," this correspondent goes on to say, "is the local habitation of the Coaching Club. Major Dickson, who with Captain



HIS GRACE THE DUKE OF BEAUFORT, K.G., PRESIDENT OF THE FOUR-IN-HAND AND
COACHING CLUBS.

[To face page 333.]

Goddard was the originator of the institution, was entered early to coaching, and drove the drag of the Royals before the days of the so-called revival. Few more enthusiastic devotees of the road than the Major, who keeps his hand in all the year round, and is never so happy as when he is driving the 'Old Times' through frost and snow, and is able to boast, even in the most severe weather, that he is up to time at 'Hatchett's' on the return journey. He has a very easy task on this occasion, driving three neat bays and a chestnut. The chestnuts of Sir Clifford Constable formed, there is no doubt, the best-looking team at the meet. He is famous for his chestnuts; he sold a team last year to Mr. Walter Shoolbred." This correspondent goes on to state that Lord Charles Beresford, Mr. Trotter, Mr. Winthrop Praed, Sir Bache Cunard, Mr. Murietta, Mr. Banbury, Sir Henry Tufton, and Sir Henry Thompson, were present with their coaches at this meet.

To show that these smart amateur coaches are not always exempt from accident, notwithstanding the care expended upon them, I give the following extract from the *Sporting Gazette* of May 13th, 1882: "A great many coaches have been seen about town during the past week or two. On Wednesday afternoon some excitement was caused in Queen's Gate by an accident to Major Lawe's drag, the axle-tree of which broke; the occupants were thrown off, one lady, Mrs. Willis, had her leg injured."* Such an event as the capsizing of a coach might have had far more serious results; in fact, it is a wonder that no one was killed, as being thrown on to a hard macadamised road or street pavement is a very different thing to being pitched out on to a grassy

* See page 367.

bank, or into a ditch, although neither can be very pleasant.

The following account of a meet of the Coaching Club appeared in the *Carriage-Builders' and Harness-Makers' Gazette*, and in my opinion is likely to be more interesting than the gossiping remarks of a sporting correspondent, whose notices of the coaches, horses, and their drivers, are apt to become somewhat monotonous. In many cases, at the meets of these clubs there are a number of carriages present, the occupants of which have come to see the coaches; the horses in these carriages are oftentimes immeasurably superior to those in the coaches, and are better harnessed, and altogether better turned out; but the fact of any horse figuring as a coach-horse on such occasions, procures him a meed of praise of which he is thoroughly undeserving, and when probably, were he in a hansom cab, he would feel far more comfortable, and be far more in accordance with his surroundings.

When going about London, and seeing such a vast number of horses, I am constantly thinking that if one only knew and understood the character and disposition of many good-looking horses one sees employed in menial occupations, what a field for conjecture would be opened to one's mental vision! Human beings possessed of nobility of mind, wonderful powers of endurance, extraordinary perseverance, and great application, combined with cleverness, generally contrive to better their position in life; in fact, there is no withstanding a man who is determined to get on in the world, and who has the necessary qualifications for doing so; but with a horse it is different. If, owing to some accident of fate, or some obscurity as to his antecedents, or if he has all his life lived in this world unnoticed by an appreciative human eye, it is very

possible, that although he have the courage of a lion, the gentleness of a lamb, the speed of a race-horse, and the intelligence of a hunter, he will remain in his lowly sphere, and never rise above it, although out of the corners of his eyes he may see in stylish coaches or smart carriages, animals vastly inferior to himself.

Without doubt there are many good horses in light carts, hansom cabs, and omnibuses, which, if well fed, well groomed, and well ridden, with proper preparation, would hold their own in the stiffest of Leicestershire runs, even though it were from Waterloo Gorse, with a burning scent breast-high, and with a straight fox. No one knows ; for was not the Godolphin Arab bought out of a water-cart in Paris, and in him did not the English thorough-bred originate ?

But to return to the subject of coaching. In the *Carriage-Builders' Gazette* there appeared the following account of a meet of the Coaching Club on May 14th, 1887 :

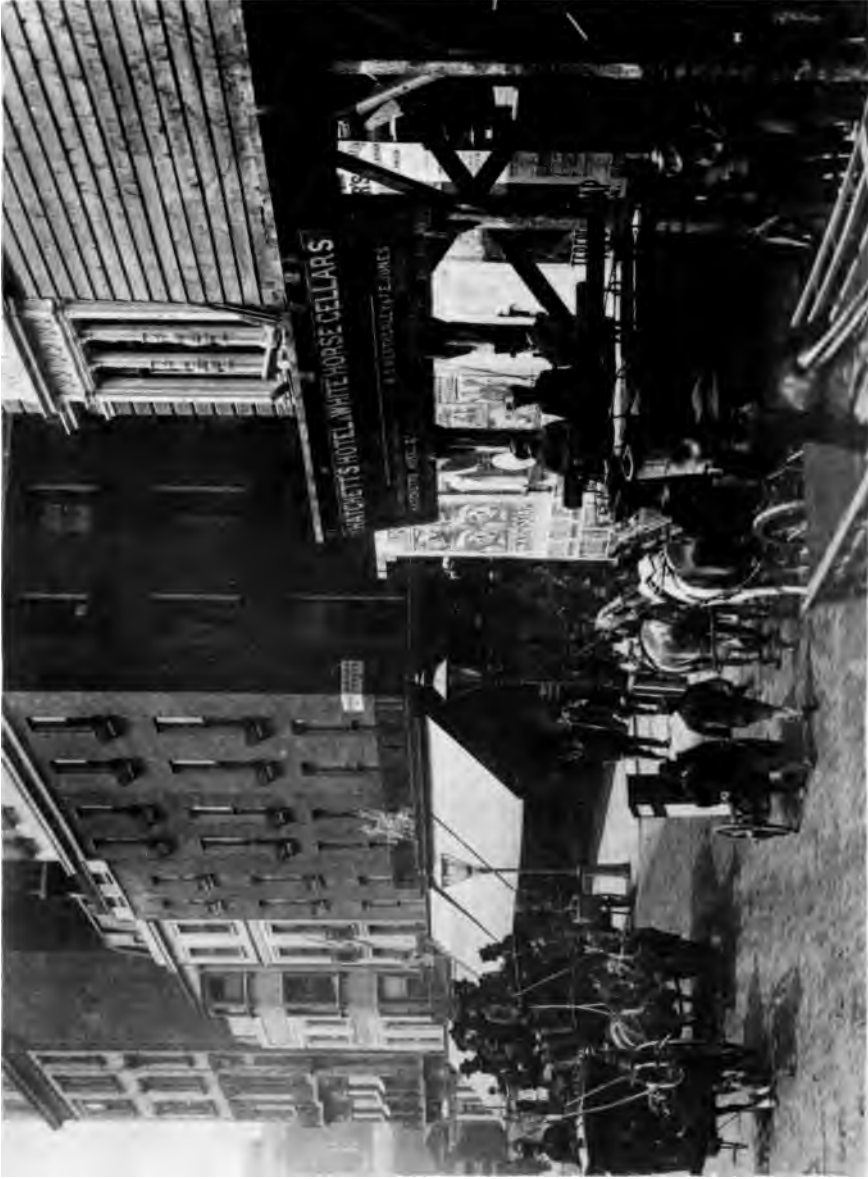
“ Many of the teams are described as small phaeton horses ; the foot-boards are complained of as being too low ; it was remarked that the harness was brass-mounted ; the top hame-straps in many cases looked shabby, the tail of the strap flopping about or twisted up into a little knot of marked inelegance ; we did not see any of the newly-patented top hame-chains on the teams as expected, which give such a prominent finish to a good harness ; there were a great many bearing-reins, which, although they may control high-couraged, restive animals, are not wanted at actual work, particularly on a journey. Curb-bits were general, and there were nose-nets used with two or three pullers ; they did not look well, but until a light, easy bit to stop a pulling horse is invented, they are the most effective contrivances yet adopted.”

I will here bring to a conclusion my remarks concerning the Four-in-Hand and Coaching Clubs, and speak of the amateur stage-coaches that start from "Hatchett's" Hotel during the summer months. As a prelude to these remarks I cannot do better than introduce the following amusing parody :

What a fine coaching day ! 'tis the first day of May,
 All the coaches to Hatchett's will come ;
 Every friend will be there, and will pay his full fare,
 And will leave all his troubles at home.
 See, the coaches are now on their way,
 Guards and coachmen their white hats display ;
 So we'll join the glad throng that goes *gaily* along,
 And we'll all go a-coaching to-day.
 We'll all go a-coaching to-day,
 The country looks charming and gay ;
 So we'll join the glad throng that goes *gaily* along,
 And we'll all go out coaching to-day.

The " Windsor," I ween, 's the first coach to be seen,
 With Davis and Greenhall and Bailey ;
 You can't well beat these three, you will very soon see,
 As you trot down through Hammersmith gaily.
 Sir Thomas not here ? Very queer !
 Let us hope he's not ill or in pain ;
 His return we'll greet gladly, and welcome him madly,
 For he *must* come a-coaching again.
 We'll all go to Windsor to-day,
 Harry Thorogood won't take your *nay* ;
 So we'll join the bright throng that goes *blythely* along,
 For we'll all go to Windsor to-day.

Here comes the " Old Times " as punctual as chimes,
 To Virginia Water *en route* ;
 Neither Knatchbull, nor Beckett, nor the Major will wreck it,
 We have Speed here and Safety to boot.
 See Wilson and Taylor are there,
 Of our Chaplain you must be aware ;
 So we'll join the glad throng that goes *spanking* along,
 And we'll all go a-coaching to-day.
 We'll all go out coaching to-day,
 For Selby is *sprightly* and gay ;
 We will join that gay throng that goes spinning along,
 And our instinct for pleasure obey.



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THE WHITE HORSE CELLARS, PICCADILLY.



This is not unlike "We will all go a-hunting to-day," which poor Caldecott so cleverly illustrated. In speaking of Randolph Caldecott, not only was he a most remarkable artist, far superior in my opinion to John Leech, but he was a humourist in the truest sense of the word. Leech's sketches were funny and amusing when taken as a whole, but the minutest detail in Caldecott's sketches provoked laughter; his sense of the humorous was so extraordinary that every figure in his drawings was suggestive of some joke; the faces of both human beings and animals told a tale which needed no further signification. I do not believe that any clever sketcher will ever surpass Caldecott.

The time-tables of the various coaches always appear in the *Sporting Gazette*. I here give one of them which appeared in the year 1879; as will be seen, it has the time-bill of the celebrated "Defiance" coach.*

BOXHILL.—A well-appointed four-horse coach leaves "Hatchett's" Hotel, Piccadilly, at 11.30 a.m., and returns from the "Burford Bridge" Hotel at 4 p.m. every day (Sundays excepted). The journey will occupy two hours and a half.

BRIGHTON.—A fast four-horse coach leaves the White Horse Cellars, Piccadilly, every Tuesday, Thursday, and Saturday at 12 o'clock, arriving at the "Old Ship," Brighton, at 6 p.m., returning Monday, Wednesday, and Friday, starting and arriving at same hours.

DORKING.—A fast four-horse coach leaves Hatchett's White Horse Cellars every morning (Sundays excepted) at 11.15, *viâ* Clapham Common, Morden, Ewell, Epsom, Alstead, Leatherhead, Boxhill, &c., returning to Piccadilly at 6 p.m.

GUILDFORD.—A fast four-horse coach runs daily, Sundays excepted, from the White Horse Cellars, Piccadilly, at 11 a.m., arriving at the "White Hart," Guildford, at 2 p.m.; returning at 4 p.m., due in Piccadilly at 7 p.m.

HAMPTON COURT.—A coach leaves the "Horse Shoe" Hotel every morning (Sundays excepted) at 11.30 a.m., *viâ* Shepherd's Bush, Hammersmith, Barnes Common, Roehampton, Wimbledon, and Kingston, arriving at the "Mitre" at 1.15 p.m., returning at 4.15, due at the "Horse Shoe" at 6 p.m.

LEAMINGTON TO STRATFORD-ON-AVON.—The "Shakespeare," four-horse coach, leaves the "Regent" Hotel, Leamington, for Stratford-on-Avon every Monday, Wednesday, and Friday at 10.30 a.m.; returning from Stratford-on-Avon at 4 p.m.

LEAMINGTON, KENILWORTH, AND COVENTRY.—The "Shakespeare," four-horse coach, leaves the "Regent" Hotel, Leamington, for Coventry, *via* Kenilworth, where the coach stops an hour, every Thursday and Saturday; returning from Coventry at 4.30 p.m.

*OXFORD AND CAMBRIDGE.—A fast and well-appointed four-horse coach, the "Defiance," will leave the "Mitre" Hotel, Oxford, every Monday, Wednesday, and Friday at 9 a.m., and will proceed through High Wycombe to London, where it will arrive at the White Horse Cellars at 2.50 p.m., twenty minutes being allowed for luncheon, when it will resume its journey through Royston, &c., to Cambridge, arriving there at 9 p.m. On Tuesday, Thursday, and Saturday it will perform the return journey, arriving and starting from either end, also at "Hatchett's," at same times. On Saturdays the coach runs through to Cheltenham, arriving at the "Plough" Hotel at 2 o'clock on Sunday morning, allowing half-an-hour at Oxford for supper, and returns on Monday, leaving Cheltenham at 4 a.m., arriving at Cambridge at 9 o'clock the same evening, allowing half-an-hour in Oxford for breakfast.

RAMSGATE, MARGATE, AND CANTERBURY.—A fast four-horse coach leaves the "Granville" Hotel, Ramsgate, every morning (Sundays excepted) at 10.30 a.m., *via* Margate, Westgate, Upstreet, &c., arriving at the "Rose" Hotel, Canterbury, at 1 p.m., returning at 3.15 p.m., due at the "Granville," Ramsgate, at 5.45 p.m.

RANELAGH AND HURLINGHAM.—Leaves "Hatchett's" each day at 3.15 and 7.45, returning at 6.45 and 11.30. Journey, thirty minutes.

ST. ALBANS.—A fast four-horse coach, "Old Times," leaves Hatchett's White Horse Cellars, Piccadilly, every day (Sundays excepted) at 11 a.m., *via* St. John's Wood, Finchley, Barnet, &c., to "George" Hotel, St. Albans, arriving at 1.30 p.m., returning at 4 p.m., arriving at "Hatchett's" at 6.30 p.m.

THAMES DITTON.—A well-appointed fast four-horse coach leaves Thames Ditton every morning at 8 a.m., *via* Hampton Court, Kew, &c., arriving at "Hatchett's" at 10 a.m., returning at 6 p.m. (Saturdays at 3 p.m.), arriving at 7.55 p.m. (Saturdays at 5 p.m.).

VIRGINIA WATER.—The "Tally-Ho" leaves "Hatchett's" Hotel, Piccadilly, at 10.45 a.m., returning from the "Wheatsheaf" Hotel, Virginia Water, at 7 p.m. every day (Sundays excepted).

WEST WICKHAM AND BECKENHAM.—A fast four-horse coach, the "Rapid," leaves Beckenham every morning at 8.45, through

Dulwich to the City, arriving at 10, and the White Horse Cellars at 10.20, returning from Piccadilly at 5 p.m. (Saturdays at 3 p.m.).

The same year, or in the year following, the Portsmouth coach was running, which again is a long-distance coach. The time-bill of this and other coaches will be seen below :

DORKING, BOXHILL, AND LONDON.—The “Perseverance,” a well-appointed four-horse coach, Mr. William Sheather proprietor, leaves “Hatchett’s” Hotel, Piccadilly, every morning, except Sundays, at 11.15 a.m., *via* Clapham 11.45 a.m., Tooting 12, *Merton 12.10 p.m., Ewell 12.48 p.m., *Epsom 1 p.m., Ashstead 1.17 p.m., Leatherhead 1.28 p.m., Boxhill 1.50 p.m., arriving at Dorking at 2 p.m.; returning at 3.15 p.m., and arriving in Piccadilly at 6 p.m.

ESHER AND LONDON.—The “Rapid,” four-horse coach, leaves the “Bear,” every morning (Sundays excepted) at 8 a.m., arriving at the White Horse Cellars at 10 a.m., returning at 5.30 p.m., due at Esher at 7.30 p.m. On Saturday it will leave London at 3 p.m.

GUILDFORD AND LONDON.—The “New Times,” well-appointed fast four-horse coach, Mr. Walter Shoobred proprietor, leaves the White Horse Cellars every week day at 11 a.m., *via* Putney 11.30, *Kingston Vale 11.50, Kingston 12.8, *Esher 12.32, Cobham 12.55, *Ripley 1.20, arriving at Guildford at 2 p.m.; returning at 4 p.m., and getting to Piccadilly at 7 p.m.

LEDBURY AND GLOUCESTER.—The mail coach leaves the “Feathers” Hotel, Ledbury, every morning at 8, arriving at the “Greyhound” Hotel, Gloucester, at 10.15; returning at 3.25 p.m.

PORTSMOUTH AND LONDON.—The “Rocket,” fast four-horse coach, Mr. C. R. Hargreaves proprietor, leaves the White Horse Cellars, Piccadilly, every Tuesday, Thursday, and Saturday, at 11.10 a.m., *via* Putney 11.40 p.m., *Kingston Hill 12.4 p.m., Esher 12.43 p.m., Cobham 1.3 p.m., *Guildford 2.5 p.m. (thirty minutes for luncheon), Godalming 2.59 p.m., *Thursley 3.25 p.m., *Liphook 4.15 p.m., Petersfield 5.3 p.m., *Horndean 5.52 p.m., and Portsmouth 7 p.m.; returning on Mondays, Wednesdays, and Fridays, leaving “George” Hotel, Portsmouth, at 10 a.m., lunching at Guildford at 2.30 p.m., and arriving at Piccadilly at 6 p.m.

VIRGINIA WATER, OATLANDS PARK HOTEL, AND LONDON.—The “Old Times,” that fast and well-appointed four-horse coach,

* Change horses.

the property of Mr. J. W. Selby, which runs somewhere every day all the year round, Sundays and Christmas Days only excepted, leaves the White Horse Cellars at 10.45 a.m., *via* *East Sheen, which it leaves at 11.30 a.m., Richmond 11.45 a.m., Twickenham 11.55 a.m., *Teddington 12.5, Hampton Court 12.15, Walton 12.40, *Oatlands Park 12.50, Weybridge 1.5, *Chertsey 1.15, and Virginia Water 1.45 p.m.; returning from Virginia Water at 3.30 p.m., Oatlands Park 4.20 and with the same times over the other stages back, arriving in Piccadilly at 6.30 p.m.

WINDSOR AND LONDON.—A well-appointed four-horse coach leaves the White Horse Cellars every morning at 10.30 a.m. (Sundays excepted), *via* *East Sheen 11.18 a.m., Richmond 11.28 a.m., Twickenham 11.35 a.m., Teddington 11.48 a.m., *Hampton 12.6 p.m., *Staines 12.50 p.m.; arriving at the "White Hart," Windsor, at 1.30 p.m.; returning at 3.40 p.m., due in Piccadilly at 6.40 p.m.

On June 20th, 1882, it was announced that a double coach would run to Brighton. During the revival of coaches this is the only instance I know of a double coach being placed upon the road. "Baron Oppenheim and Mr. Steward Freeman will commence running a double coach to Brighton on the 17th of this month, leaving 'Hatchett's' and Brighton at 11.30 a.m., and arriving at their respective destinations at 5.30 p.m. The down coach will lunch at Reigate, the up coach at Crawley. The coaches will be supplied by Holland, horsed by E. Woodlands; and E. Fownes and J. Thorogood will be the coachmen."

On October 17th, 1885, the following bill appeared in the *Sporting Gazette*:

LEDBURY AND GLOUCESTER.—The mail coach leaves the "Feathers" Hotel, Ledbury, every morning at 8, arriving at the "Greyhound" Hotel, Gloucester, at 10.15 a.m.; returning at 3.25 p.m.

OATLANDS PARK HOTEL AND LONDON.—The "Old Times," a fast and well-appointed four-horse coach (Mr. J. W. Selby proprietor), runs daily (Sundays excepted) from the White Horse

* Change horses.

Cellars, "Hatchett's" Hotel, Piccadilly, leaving at 11 a.m., arriving at Putney 11.30 a.m., *Putney Vale 11.45 a.m., Kingston 12.10 p.m., *Hampton Court 12.15 p.m., and "Oatlands Park" Hotel 1 p.m.; returning at 3 p.m., *Hampton Court 3.40 p.m., Kingston 3.45 p.m., *Putney Vale 4.10 p.m., arriving at White Horse Cellars at 5 p.m.

These two coaches ran all through the winter, the Ledbury and Gloucester coach starting as early as eight o'clock in the morning, which, on a dark, raw winter morning, could not have been very inviting. As the following time-bill appeared in the *Sporting Gazette* of March 13th, 1886, we may take it for granted that they ran all through the winter:†

LEDBURY AND GLOUCESTER.—The mail coach leaves the "Feathers" Hotel, Ledbury, every morning at 8, arriving at the "Greyhound" Hotel, Gloucester, at 10.15 a.m.; returning at 3.25 p.m.
OATLANDS PARK HOTEL AND LONDON.—The "Old Times," a fast and well-appointed four-horse coach (Mr. J. W. Selby proprietor), runs daily (Sundays excepted) from the White Horse Cellars, "Hatchett's" Hotel, Piccadilly, leaving at 11 a.m., arriving at Putney 11.30 a.m., *Putney Vale 11.45 a.m., Kingston 12.10 p.m., *Hampton Court 12.15 p.m., and "Oatlands Park" Hotel 1 p.m.; returning at 3 p.m., *Hampton Court 3.40 p.m., Kingston 3.45 p.m., *Putney Vale 4.10 p.m., arriving at White Horse Cellars at 5 p.m.

The following interesting letter appeared in the *Sporting Gazette*, describing the "Defiance" coach, horsed by Carleton Blyth, whom I knew when he was a very small boy, never supposing that he would turn out such an adventurous coachman:

THE "DEFIANCE" COACH-HORSES.

To the Editor of "The Sporting Gazette."

SIR,—The dreadful summer has caused me to postpone a day I have long promised myself with this wonderful coach—the coach of the season—but the weather being hopeless I determined at last to have

* Change horses.

† The Bentley Priory coach also runs throughout the winter, very often, I should imagine, going and returning empty.

a try, wet or fine, and was lucky enough to pick out one of the few bright days we have had for my expedition.

The old saying, "Nothing succeeds like success," came to mind in studying the various teams of the "Defiance." The proprietor, Carleton V. Blyth, Esq., is to be congratulated on having so successfully carried out the pluckiest undertaking attempted during the present revival of road coaching. "Nimrod," in the old book, "Road, Turf, and Chase," says "a fast coach has, or ought to have, very nearly a horse for every mile of ground it runs, reckoning one way, or one side of the ground." This old-fashioned advice has been followed in the present instance.

On Sept. 15, Messrs. Tattersall will sell without reserve 120 horses—a horse a mile—the entire stud of Carleton V. Blyth, Esq., nearly all of which have been in regular work in the coach between Oxford, London, and Cambridge during the season (six months). "For particulars," says the characteristic yellow yard, "see catalogue." But I say *see the horses*. Any one who is looking forward to the coming hunting season, and who is not already suited, or who wants harness horses of rare stamp and quality, should see those of the "Defiance." They have nearly all good shoulders—about the first thing one looks for—and most of them look like hunters. Of course they are very fit, and considering the unusually long season, the heavy state of the roads all the summer, and the *pace they have been required to go*, they are wonderfully well and fresh. Naturally some are a little stale on their legs after such trying work, but much jarring and bruising of feet has been avoided by the capital plan of shoeing with leather.

The first team I saw were those four bays who come into Oxford at 9 p.m., and submit so patiently to the rather demonstrative crowd of admirers who assemble at the "Mitre" by lamplight to see the "Defiance" arrive. At 9 p.m. one can only perceive they are bays, and that the coach is yellow, and that Fownes has brought them in; and our old friend, young Cracknell, has apparently an unlimited number of hat-boxes and portmanteaus to dive for in the boot. But at 9 a.m. we see these same bays to advantage. They are a real old-fashioned sort, strong wheelers, with a wear-and-tear look about them I hardly expected; leaders a trifle lighter, all bright and healthy in their coats, and perfectly turned out in every way. The coach is as good as those of Messrs. Holland & Holland always are. They go off quickly and gently down the old street at Oxford, Cracknell making sweet music on his horn in a way that few others can. As I have said, the morning was, for a wonder, bright and sunny; and although the meadows round the town were, of course, mostly under water, and no end of hay floating about, our road was high and dry enough, and the country lovely through which we passed to Wheatley, the first change. Here they took on four other bays, lighter than the last, Irish-looking horses I thought, quick and active, and with a useful

hunter look about them. From Tetsworth bigger ones. Here I had time to notice some odd horses, as I believe they are called. A grey gelding, with a great deal of quality, and a big bay ; so that here are six big horses, all of whom go well together as leaders or wheelers. Further on, a rather big bay mare, with fine quarters and strong back, said to be a wonderful jumper ; and I must not forget a bay, or brown, gelding—with so many white hairs he is almost roan—who shows a lot of breeding.

Our next change was at Stokenchurch—four chestnuts, the wheelers a perfectly-matched pair, compact and useful, the leaders somewhat lighter, as I fancy they should be. All this way they go a great pace, galloping up and *down* hill, severely testing soundness of legs and feet. From High Wycombe to Gerrard's Cross is a slower stage, and a very heavy one for horses with a loaded coach. A few minutes at the "Bull" Inn at the latter place for refreshment, served in a pleasant parlour overlooking the common and picturesque woods beyond, so well known to hunting people. The landlord of the "Bull" is a sporting character, and most hospitable. While discussing the good fare he provided Cracknell puts his head in at a window and declares we have only two minutes—so off again. Brown ones this time ; a strong lot, with a big blood leader who took my fancy. Galloped along to Hayes, where another chestnut team succeeded them. I thought it worth all the journey to watch the action of the near side leader. Those who have seen this mare will guess her companions have to "go along." From Acton, four of the eight black-browns that everybody knows who has seen the "Defiance" come into or leave London during the past season. It is no use *my* attempting to describe them. It is to be hoped they will all be sold together, for it would be a thousand pities to part two such teams.

It seems odd not to finish the journey in Piccadilly, but Mr. Carleton Blyth does not do anything so ordinary. He only allows twenty minutes for luncheon.

In the interval one can study human as well as equine nature on the steps at "Hatchett's." Even at the end of August public interest in this model coaching venture continues. Presently the four greys, as well known as their black-brown brethren, arrive to do the first stage out of London towards Cambridge, and Mr. Carleton Blyth takes the ribbons. The start from the Cellars with this team is well worth alone going to see ! At Tottenham High Cross the greys are changed for blood bays, and by *blood* ones I do not mean weedy thorough-breds, but strong, useful ones, pictures of hunters, all up to 13 st. across country. At Waltham Cross four dark browns, wonderfully matched, about 15 hands 3 in., do the stage to Hoddesdon. From thence to Wade's Mill four red roans, big, short-legged horses, perfect for carriage pairs one would say. The "Feathers" here is a regular old-fashioned inn, where one can get an excellent cup of tea. At nearly all the places I have named odd horses are kept—several

together, where the accommodation is convenient. After stopping some ten or fifteen minutes at Wade's Mill they take on two chestnuts, big, strong harness horses, with brown and roan leaders, for continuing the now flying journey—for the pace at this part of the road becomes to the uninitiated something frightful! I am old-fashioned in my ideas possibly, and know I shall be laughed at for saying so—but there is no denying Mr. Carleton Blyth *does* go very fast!

From Buntingford to Royston (I think the fastest stage), four more chestnuts, the off-wheeler a wonderful mover, who trots when others gallop. On to Harston two bay blood leaders, apparently, for it began to get dark; and bay wheelers, all little ones, still going as hard as ever. Into Cambridge a roan, two greys, and a bay kept up the pace to the last moment. No wonder crowds come out on foot, in gigs and pony-carts, and every description of "conveyance," to see and greet the "Defiance" and the popular owner. No wonder this coach—the "sensation" coach of the season—has been heavier laden than any other all the summer. It is a marvel, and an immense amount of credit is due to Mr. Carleton Blyth, not only for placing such a coach upon the road, but for the way in which he has done it; the admirable way in which the various teams are classed, and the way in which every individual horse seems to fill the very place he is best suited for. If Mr. Carleton Blyth personally selected these horses, he has shown very great judgment, and I understand they were all purchased from one dealer.

I have no space to tell of the perfection of all other arrangements connected with the "Defiance," and I did not go the extra weekly journey to Cheltenham, when this coach does 160 miles in sixteen hours. I *did* hear it hinted that next season Mr. Carleton Blyth intends putting a coach on the road from London to York. If another "Defiance," it will be difficult to equal—impossible to beat.—Faithfully yours,

CUB-HUNTER.

Another interesting letter appeared in the *Field*, Sept. 20th, 1879, respecting the Brighton coach:

ON THE BRIGHTON COACH.

It is now some time since we have told our readers anything about the Brighton coach and its doings, and as it has this season altered its route in some measure, Mr. Freeman, one of the proprietors, very kindly offered us a seat when we could spare a day, in order that we might see the beauties of the road he now travels, and compare them with the line they have taken since leaving the Reigate route until the commencement of the present season. Using what petitions we thought most likely to influence the clerk of the weather and secure

a fine day, so that we might not be almost washed from our seat, as was the case when travelling on the Virginia, we at length settled on a day for the trip, and awaited it with some composure, seeing that the skyey influences had not been quite so unpropitious for a few days as during the greater part of the summer. Alas! what was our disappointment when the day came to find that a sun which shone bright and fair at seven o'clock in the morning was quite hidden by nine, when the wind came howling over the hills, driving before it thick storm-clouds that boded ill for our prospects of pleasure. As old-fashioned people would say, we laid in the country the previous night, and consequently had a short journey by rail to reach "Hatchett's," and sad it was as we sped along to see whole fields flooded in the Harrow country, and the hay being washed about from one side to the other like a ship in a storm. Still, we hoped, as it were, against hope, and flattened our nose against the window in the front room at "Hatchett's," only to see the splash and hear the continual drip, drip of the rain as it came down on road and pavement. The Dorking drove up, and started without a passenger. Then came Hubble with the Boxhill, and proved a sort of Job's comforter by inquiring if we were well waterproofed, predicting a very sufficient soaking for us if we were not. He, too, drove off with the coach to himself, and we were left again to meditate on our fate. At length we see Thorogood drive up the Brighton with four very useful bays. The weather seems better for a time, and when Mr. Freeman takes his place on the bench it scarcely drops at all, so we take heart of grace and resolve that the weather has decided to clear up at noon, according to custom. How woefully are we undeceived, for ere Hyde Park Corner is reached it is down upon us again with tropical violence, and so wet is it as we go on that the welcome which the bevy of pretty girls in the South Lambeth Road accord to all the coaches day after day is scarcely noticed in our efforts to keep ourselves dry. We have had tramways down to Vauxhall Bridge, and passing the "Swan" into the Brixton Road, drop on to them again, and right lustily they sway the coach about at intervals, for our pace was good, the bays being of the sort that can get along, and make a long journey seem a short one. The near-wheeler, we hear, is a rare horse, and has worked the whole season through without a single rest day, but his companion is new to the work, having only been at it a day or two, but is a rare short-legged stamp of mare, such as would carry a pretty good weight to hounds, which, we are told, has been her vocation up to the end of last season.

At length the abominations of the tram are done with, though only for a time, as we find afterwards, and passing the pleasant villas between Brixton and Streatham, we pull up at the "Greyhound" in forty-five minutes, not very bad work from "Hatchett's." Our next team, a roan and chestnut at lead and black and chestnut at wheel, were a very useful lot again, with plenty of power about

them, and, moreover, seemed a steady, even lot to drive. These took us on by Norbury Manor Farm, where, as in other places, the speculating builder seems to be putting his foot down pretty firmly, and so to the outskirts of Croydon, before reaching which we met with another single tram line in course of construction, and a very bad one it is for throwing the coach about. We heard it is to run to Addington, and should never be surprised were it to be carried on to meet the London one at Brixton, for the space between there and Croydon that is yet unlined with houses is not very great, and once get it covered there would probably be no lack of passengers. If it should ever happen, though, it will diminish the pleasure of coaching on this road in no inconsiderable degree. As it was, it caused a good deal of twisting and crossing from one side to the other to enable us to get along, and gave us several good examples of the nicety to which four horses can be driven when they are well put together, and a man has hold of them who knows what he is about.

It is very evident that Mr. Freeman's experience on the box for some years has not been thrown away, for we seemed to glide by all obstacles, and slip through difficulties as if by magic. It is a strange thing, but the last time we were on the Brighton the straight passage through Croydon was barred, we think then on account of either assizes or sessions being held there, and we had to turn aside and go down a back way. Now the road was up, or something of that sort, and we had to make a circuit of nearly the entire town ere getting once more into the right track. This, of course, takes time, and lays a little extra stress on the team, but they are equal to the occasion, for Mr. E. Woodlands, from whom we believe the horses came, knows what he is about far too well to send Mr. Freeman anything that is not equal to more than the required pace, and able to make up lost time on an emergency. Beyond Croydon we changed at a little roadside public-house, the name of which we could not learn, for it stood rather back from the road, and the weather was far too wet to induce us to vacate our seat for the purpose of seeing. Here a team of four greys were put to, the leaders as neat little nags as any one need wish to run their eye over. The off one having been bought in a selling race at Croydon, should be worth looking after when they come up for sale, as it must have a turn of speed, and although certainly not a weight-carrier it should make a quick nag for a light weight across a country, or a smart covert hack for any one who likes to pass as much time between the sheets of a morning as he conveniently can. Its companion is also very smart, and the near-wheeler struck us as being a capital sort, and at one part of the journey we noticed it trotting at ease while the rest were galloping. Altogether they were a very smart lot, such a team as Mr. Freeman says he likes to drive, as he prefers little quick ones to a larger and less handy team. They were as

fresh as paint, and any one who had seen them going along full of play as kittens, would have set a coach-horse's down as a wondrously easy life in the present day. These took us along merrily until the finish of their stage was reached, when they were replaced by a very good-looking white-faced black at lead, whose companion was a bay, and behind them we had a dun and a grey, both very powerful horses.

What about our journey and the new route? As to the first, it was as fortunate and pleasant as well could be under the circumstances. It would be a manifest untruth were we to say that anything appears as much *couleur de rose* in a drenching rain as in bright sunshine, but a determination to make the best of things, and companions equally willing to look at the bright side, will do wonders. This we had. No doubt many little things which would have amused ourselves and readers were passed over unnoticed, for it's ill writing notes in hard rain, and a man who has to guard himself from rain and his hat from flight as best he can is not in the position to write accurately everything that occurs; but these are evils that must be borne. As to the change of route, it is, we think, altogether for the better. Those who drive say the road is better, though rather longer, perhaps a mile; while as regards its beauty there can be no diversity of opinion. The other is not to be compared to it for the views obtained or the interest in the places passed through. To this, perhaps, may in some measure be attributed the fact that in spite of the unkind summer the Brighton has loaded better this season than she did last, though Mr. Freeman thinks an increase in pace has something to do with it. Perchance it has; we do like to go the pace in the present day on the road as well as elsewhere. That she has loaded better is a fact, no matter how it comes about, and we are heartily glad of it. May she continue to do so until the end of the season, and have such a success that the proprietors may be induced to start her year after year until they are beyond the delights of coaching, and may young ones be constantly coming forward to fill their places as each retires.

Innumerable articles of this kind are always appearing in the sporting papers, so that the proceedings of the coaches are not likely to remain long unreported. Some passengers on these coaches seem to be in some doubt as to the social standing of the gentlemen who drive them; I have heard that on more than one occasion a tip has been offered them, and I think it was Mr. Freeman who told me that, having driven a gentleman and his family on his coach to Brighton, he was coolly requested by Paterfamilias, when he arrived there, to

drive on to his residence at Kemp Town, instead of depositing them at the "Albion" Hotel, which was the regular destination of the coach.

The owners of these coaches make no profit out of their venture, but very frequently lose money; the only time when they make any adequate return for their expenditure is when their coach is taken off the road and their horses are sold by public auction. On these occasions these large studs of coach-horses frequently realise very long prices, and as the hunting season will shortly commence, they are very often sold as hunters. As to their going in harness, about this there can be no doubt, since they have been driven for several months past, and their not being laid up is a certain proof of their soundness; in fact, I do not think that people in search of carriage-horses could do better than take a ride on one of these coaches just as the season is drawing to a close, when they will have every opportunity of observing which are the best horses in the various teams, and making their own selection; after which, when the horses are sold at Tattersall's or Aldridge's, they can bid for them with a perfect certainty of obtaining what they require. I have no doubt that the sum realised by the sale of these horses far exceeds what they cost when got together in the first instance; and certainly the men who horsed these coaches which contribute so greatly to people's pleasure and amusement, deserve some reward for their exertions.

I have just come across a paragraph in the *Morning Post* of Thursday, September 22nd, 1887, giving the prices realised by the sale of the Windsor coach-horses of this year, which is as follows :

SALE OF COACH-HORSES — Messrs. W. and S. Freeman sold by auction, yesterday, at the Repository, St. Martin's Lane, 35 horses, which had been worked daily in the Windsor coach throughout the summer, between "Hatchett's," Piccadilly, and Windsor. Amongst them were many well-known hunters, also match pairs and single harness horses, most of them having fine action, power, and quality. The prices obtained were as follow:—Eileen, a chestnut mare, 86 gs. ; Quickstep, a chestnut mare, 13 gs. ; The Swell, a chestnut gelding, 66 gs. ; Gamecock, a chestnut gelding, 72 gs. ; Christopher, a chestnut gelding, 60 gs. ; Sandown, a grey gelding, 26 gs. ; Rupert, a chestnut gelding, 150 gs. ; Lincoln, a chestnut gelding, 110 gs. ; Stockings, a chestnut gelding, 60 gs. ; Colleen Bawn, a grey mare, 46 gs. ; Plymouth, a black gelding, 86 gs. ; Kate, a bay mare, 35 gs. ; Squire, a chestnut gelding, 23 gs. ; Mentmore, a brown gelding, 57 gs. ; Cossack, a grey gelding, 56 gs. ; Ewart and Monkey, a pair of leaders, were sold together, and were knocked down for the small sum of 50 gs. ; Sala, a chestnut gelding, 55 gs. ; Dunmow, a dun gelding, 44 gs. ; Maude, a chestnut mare, 31 gs. ; Bacon, a roan gelding, 29 gs. ; Rugby, a bay gelding, 50 gs. ; Tradesman, a roan gelding, 25 gs. ; Kathleen, a brown mare, 60 gs. ; Beverley, a bay mare, 48 gs. ; Dublin, a bay gelding, 30 gs. ; Sweep, a black gelding, 35 gs. ; Lottery, a grey gelding, 35 gs. ; Lily, a grey mare, 30 gs. ; Ascot, a grey mare, 18 gs. ; Corky, a grey gelding, 14 gs. ; Marksman, a dun gelding, 20 gs. ; Punch, a bay gelding, 20 gs. ; Scamp, a brown gelding, 14 gs. ; Doctor, a black gelding, 26 gs. ; Worcester, a brown gelding, 84 gs.

It will be noticed that they averaged about fifty pounds ; Lincoln, a chestnut gelding, fetching as much as one hundred and ten guineas ; whilst Eileen fetched eighty-six guineas ; and also Plymouth, eighty-six guineas ; Worcester, eighty-four guineas. These are fairly good prices ; but several, it will be noticed, did not fetch more than fourteen guineas.

In concluding this chapter, I do not think that I can do better than give the time-bills of the coaches that have started from the White Horse Cellars during the present season. They are as follows. To commence with the Dorking coach :

On and after 2nd May, 1887,

THE DORKING AND BOX HILL COACH,
"PERSEVERANCE,"

WILL LEAVE

HATCHETT'S WHITE HORSE CELLARS, PICCADILLY,

AT 11.10 A.M.

Arriving at "WHITE HORSE HOTEL," DORKING, at 2.10 P.M.,

AND RETURN FROM THE

"WHITE HORSE HOTEL," DORKING,

AT 3.40 P.M.,

Arriving at "HATCHETT'S" at 6.40 P.M., EVERY DAY (Sundays excepted).

FARES.	LEAVING	A.M.	FARES.	RETURNING FROM	P.M.
s. d.	PICCADILLY,		s. d.	DORKING,	
	"Hatchett's" . . .	11.10		"White Horse Hotel" . . .	3.40
1 6	BARNES . . .	11.40	1 0	BOX HILL,	
2 6	*ROEHAMPTON,			"Burford Bridge Hotel" . . .	3.50
	"King's Head" . . .	11.55	1 0	MICKLEHAM . . .	3.55
4 6	KINGSTON . . .	12.30	2 0	LEATHERHEAD,	
5 0	*SURBITON,			"The Swan" . . .	4. 7
	"The Plough" . . .	12.40	2 6	*ASHTEAD,	
6 6	EWELL, "Spring Hotel" . . .	1. 7		"Ashtead Hotel" . . .	4.20
7 0	EPSOM, "King's Head" . . .	1.17	3 0	EPSOM, "King's Head" . . .	4.33
7 6	*ASHTEAD,		3 6	EWELL, "Spring Hotel" . . .	4.43
	"Ashtead Hotel" . . .	1.30	5 0	*SURBITON,	
8 0	LEATHERHEAD,			"The Plough" . . .	5. 7
	"The Swan" . . .	1.43	5 6	KINGSTON . . .	5.17
8 6	MICKLEHAM . . .	1.55	7 6	*ROEHAMPTON,	
9 0	BOX HILL,			"King's Head" . . .	5.50
	"Burford Bridge Hotel" . . .	2. 0	8 6	BARNES . . .	6.10
10 0	Arriving at DORKING,		10 0	Arriving at PICCADILLY,	
	"White Horse Hotel" . . .	2.10		"Hatchett's" . . .	6.40

* Change Horses.

Single Fare, 10s. Return Fare, 15s. Box Seat, 2s. 6d. extra each way.

The whole of the Coach to Box Hill and Dorking and back, £8 8s.

For further particulars apply to W. & A. BANKS, *White Horse Cellars,*
Piccadilly.

Telephone No. 3831.

After this comes the Oatlands Park and Virginia Water coach :

THE "OLD TIMES"

OATLANDS PARK AND VIRGINIA WATER COACH

WILL LEAVE

HATCHETT'S WHITE HORSE CELLARS, PICCADILLY,

AT 10.45 A.M. ;

AND RETURN FROM THE

*"WHEATSHEAF HOTEL," VIRGINIA WATER,*AT 3.30 P.M., EVERY DAY (*Sundays excepted*).

FARES.	LEAVING.	A.M.	FARES.	RETURNING.	P.M.
s. d.	PICCADILLY, "Hatchett's"	10.45	s. d.	VIRGINIA WATER, "Wheatsheaf"	3.30.
2 0	*EAST SHEEN, "Bull"	11.30	1 6	*CHERTSEY, "Crown"	3.58
3 0	RICHMOND, "Greyhound"	11.45	3 0	*OATLANDS PARK HOTEL	4.25
4 0	TEDDINGTON, "Royal Oak"	12. 5	3 6	WALTON . . .	4.35
5 0	*HAMPTON COURT, "King's Arms"	12.15	5 0	*HAMPTON COURT, "King's Arms"	5. 0.
7 0	WALTON . . .	12.40	6 0	TEDDINGTON, "Royal Oak"	5.10.
7 6	*OATLANDS PARK HOTEL	12.50	7 0	RICHMOND, "Greyhound"	5.30
8 6	*CHERTSEY, "Crown"	1 20	8 0	*EAST SHEEN, "Bull"	5.45
10 0	VIRGINIA WATER, "Wheatsheaf"	1.45	10 0	PICCADILLY, "Hatchett's"	6.30.

* Change Horses.

Return Fare, 17s. 6d. ; Box Seat, 2s. 6d. extra each way.

Intermediate Fares charged.

For further Particulars, apply to W. & A. Banks, White Horse Cellars,
Piccadilly.

Then the Hampton Court coach :

On and after MONDAY, APRIL 18th, 1887,

THE "NONPAREIL,"

HAMPTON COURT & LONDON FOUR-HORSE

WILL LEAVE

THE "HOTEL METROPOLE," CHARING C

At 11.15 a.m., EVERY DAY (Sunday included),

CALLING AT

THE "GRAND HOTEL,"

AND

HATCHETT'S WHITE HORSE CELLAR, PICC.

Via BARNES, EAST SHEEN, RICHMOND, TWICKENHAM, & TED

TIME TABLE.

LEAVES	A.M.	RETURNS FROM
"HOTEL METROPOLE". .	11.15	HAMPTON COURT, "Mitr
"GRAND HOTEL" . .	11.20	RICHMOND, "Greyhound
PICCADILLY, "Hatchett's" .	11.30	EAST SHEEN, "The Bull
*EAST SHEEN, "The Bull" .	12.15	PICCADILLY, "Hatchett's
RICHMOND, "Greyhound" .	12.30	"HOTEL METROPOLE" .
HAMPTON COURT, "Mitre" .	1. 0	

* Change Horses.

Seats can be booked at the "Hotel Metropole" and Hatchett's V
Cellar, Piccadilly.

FARES :—5s. each way ; Box Seat, 2s. 6d. extra.

N.B.—On Sundays the Coach will leave the "Hotel Metropole"



E. FOWNES

A well-known professional Coachman.

This is followed by the Guildford coach, the "New Times," in contradistinction to Selby's "Old Times."

THE "NEW TIMES" GUILDFORD COACH

LEAVES THE
WHITE HORSE CELLAR, PICCADILLY,

AT 11 A.M.,
AND RETURNS FROM THE
"ANGEL HOTEL," GUILDFORD,
AT 4 P.M. EVERY DAY (*Sundays excepted*).

FARES.				FARES.			
IN.	OUT.			IN.	OUT.		
s. d.	s. d.		A.M.	s. d.	s. d.		P.M.
		PICCADILLY,				GUILDFORD, the	
		"Hatchett's"	11. 0			"Angel Hotel"	4. 0
		PUTNEY,		1 0	2 0	RIPLEY,	
		Railway Station	11.30			the "Talbot"	4.32
3 6		KINGSTON VALE,				WISLEY HEATH,	
		"Robin Hood"	11.50			the "Hut"	4.45
2 6	4 6	KINGSTON,		2 0	3 0	COBHAM, the	
		the "Griffin"	12. 8			"White Lion"	5. 0
	5 0	THAMES DITTON	12.20	2 6	4 6	ESHER,	
3 6	5 6	ESHER,				the "Bear"	5.20
		the "Bear"	12.32		5 0	THAMES DITTON	5.40
4 0	7 0	COBHAM, the		3 6	5 6	KINGSTON,	
		"White Lion"	12.55			the "Griffin"	5.50
		WISLEY HEATH,		6 6		KINGSTON VALE,	
		the "Hut"	1.10			"Robin Hood"	6. 6
5 0	8 0	RIPLEY,				PUTNEY,	
		the "Talbot"	1.20			Railway Station	6.28
6 0	10 0	GUILDFORD, the		6 0	10 0	PICCADILLY,	
		"Angel Hotel"	2. 0			"Hatchett's"	7. 0

Return Fare, 15s. Outside. Box Seat, 2s. 6d. extra each way.

N.B.—Intermediate Fares are charged at an average rate of 4d. per mile, but not less than 1s. taken.

PASSENGERS' LUGGAGE FREE.

Places can be secured in advance, either at "Hatchett's," White Horse Cellar, Piccadilly, or at the "Angel Hotel," Guildford.

PARCELS CARRIED AT MODERATE RATES, AND PUNCTUALLY DELIVERED.

The "Defiance," which comes next on my list, runs to Bentley Priory from the "Métropole" and "Grand" Hotels, and is driven by Fownes, a famous professional coachman, whose name will be found frequently mentioned in the annals of coaching; he is an excellent

whip, and a good fellow, and his sons, too, are good coachmen.*

THE "DEFIANCE" COACH.

LONDON AND BENTLEY PRIORY.

TIME TABLE, 1887.

LEAVING.

"HOTEL METROPOLE".	. . . . .	11.30
PICCADILLY, "Hatchett's Hotel".	. . . . .	11.45
HENDON, arr.	. 12.30.	"WELSH HARP," dep. . 12.35
EDGWARE, "Bald-faced Stag"	. . . . .	arr. 12.50
STANMORE, "Abercorn Arms"	. . . . .	arr. 1. 5
BENTLEY PRIORY .	. . . . .	arr. 1.15

Change Horses.

RETURNING.

BENTLEY PRIORY .	. . . . .	4.30
STANMORE .	. . . . .	arr. 4.45
EDGWARE, "Bald-faced Stag"	. . . . .	arr. 5. 0
HENDON, arr.	. 5.15.	"WELSH HARP," dep. . 5.20
PICCADILLY, "Hatchett's Hotel"	. . . . .	arr. 6. 5
"HOTEL METROPOLE".	. . . . .	arr. 6.10

Change Horses.

Starting on Sundays at 12.0 p.m. "Welsh Harp," 1.0.

Bentley Priory at 1.45; returning at 5.30.

"Welsh Harp," 6.15, arriving at "Hotel Metropole," 7.0 p.m.

Seats may be secured at "Hotel Metropole," and "Grand Hotel," Northumberland Avenue, Charing Cross.

LONDON TO BENTLEY PRIORY.

FARES :—Single, 6s.; Return, 10s.; Box Seat, 2s. 6d. extra each way.

The whole of the Coach to Bentley Priory and back, £6 6s.

Table d'hôte, 3s. 6d. for Coach.

* When calling at Messrs. Shanks' coach-building establishment in Great Queen Street, I was shown an admirably-built four-horse coach, intended as a present for Fownes by several gentlemen who had either driven the Bentley coach, or who had known him in past times. The gift consisted of the coach and a set of four-horse harness, a remarkably handsome present, as the coach could not have cost less than three hundred guineas, and the harness would no doubt cost another sixty. The body of the coach is a dark colour, the wheels and under-carriage being yellow. The name of the coach, which is called the "Defiance," and the owner's name are both painted on it in the usual manner. As for the coach, it was quite ready, like the highwaymen of whom I have written, to take to the road.



THE BENTLEY PRIORY COACH AT BENTLEY PRIORY.

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Bentley Priory was some time the residence of Queen Adelaide, the consort of William IV.; it afterwards belonged to the Duke of Abercorn, and more recently to Sir John Kelk. I frequently visited the place when it was in his possession; the park and gardens are quite worth a visit; in fact, once inside the gates, one might be a hundred miles from London instead of only fourteen.

The next coach I must mention is the "Wonder," which runs from London to St. Albans:

THE "WONDER" COACH.

LONDON AND ST. ALBANS (*via* WATFORD).

TIME TABLE, 1887.

FARES. s. d.	MILES.	LEAVING	
		PICCADILLY, "Hatchett's Hotel"	10.45
2 6	7	*HENDON	arr. 11.30
		"Welsh Harp"	dep. 11.34
4 0	9	EDGEWARE, "Bald-faced Stag"	arr. 11.45
5 0	13	*STANMORE	arr. 12.10
		"Abercorn Arms"	dep. 12.14
7 0	17	*WATFORD	arr. 12.50
		"Rose and Crown"	dep. 12.54
10 0	25	*ST. ALBANS, "Peahen"	arr. 1.45
RETURNING FROM			
		ST. ALBANS, "Peahen"	3.15
3 0	8	*WATFORD	arr. 4. 5
		"Rose and Crown"	dep. 4. 9
5 0	13	*STANMORE	arr. 4.50
		"Abercorn Arms"	dep. 4.54
6 0	15	EDGEWARE, "Bald-faced Stag"	arr. 5.15
7 6	19	*HENDON	arr. 5.25
		"Welsh Harp"	dep. 5.29
10 0	25	PICCADILLY, "Hatchett's Hotel"	arr. 6.15

* Change Horses.

LONDON TO ST. ALBANS.

FARES—Single Journey, 10s.; Return, 15s. Box Seat, 2s. 6d. extra each way.

The whole of the Coach to St. Albans and back, £8 8s.

Then the Brighton coach, for this coach has no name beyond that of the "Brighton Coach."

On and after Saturday, June 4th, 1887.

THE BRIGHTON COACH

LEAVES THE

WHITE HORSE CELLARS, PICCADILLY,

EVERY

TUESDAY, THURSDAY, AND SATURDAY, AT 11 A.M.,

RETURNING FROM THE

"OLD SHIP HOTEL," BRIGHTON,

EVERY

MONDAY, WEDNESDAY, AND FRIDAY, AT 12 NOON.

Departure.		TIME TABLE.	Departure.	
11 a.m.	LONDON.			12 noon
11.40	STREATHAM.			12.55
12.35	SMITHAM BOTTOM.			1.55
1.40 }	HORLEY, "CHEQUERS."			{ 2.50
2.10 }	(30 Minutes Allowed.)			{ 3.20
3.5	HAND CROSS.			4.25
4.5	ALBOURNE.			5.20
5.0	BRIGHTON.			6. 0

FARES:

INSIDE, 10s. ; OUTSIDE, 15s. ; BOX SEAT, 2s. 6d. EXTRA.

Intermediate Fares at an average rate of 4d. per mile, but not less than 1s. charged.

PARCELS CARRIED AND PUNCTUALLY DELIVERED.

This terminates my chapter on amateur coaching. Should a new edition of this work be ever called for, I may, possibly, have something further to say on the subject which will be of more interest than the facts already recorded ; but a book that is, to a certain extent, on a technical subject requires constant and prolonged familiarity with all that refers to that subject. By obtaining such knowledge, facts worth recording may be mentioned with a certainty of arousing interest ; but the subject is one that requires revision, and addition, and very possibly omission of certain passages of doubtful interest.

Coaching may be regarded as a pastime not within the reach of any but rich men, and, therefore, I am aware I can only rely upon a small number of readers ; but driving, in the more modest acceptation of the word, is a subject regarded with interest by all classes of the community without restriction ; and, consequently, I entertain the most sanguine hopes with regard to my second volume, which treats of Driving, in the widest sense of the word.

CHAPTER IX.

COACH-BUILDING.

That one-hoss shay—Scale-drawing—Owner's superintendence—Dimensions of four-horse coach—Broken poles and axles—Timber employed in coach-building—Wheels—Varnish *versus* paint—Manipulation of timber—Wheels—Collinge's patent axle—The æquirotal carriage—The mail axle—The carriage as distinct from the body—Iron-work—Sons of Vulcan—Carriage-springs—Painting and varnishing—Lining carriages—Improvements in carriage-building—C springs—The English drag—The sobriety of French workmen—Scientific training—American wheels—The interchangeable system—The Paris and Dublin exhibitions—Cruppers and breechings—Labour-saving machinery—Indiarubber tires—Standard sizes—The millionth part of an inch—Standard gauges—Improvements in carriage-building—Coach-building periodicals—Driving by night—Carriage-lamps—Height of coaches—C springs—Brought up to a trade.

BEFORE commencing this chapter, I here give Oliver W. Holmes's views on coach-building, as evidenced by his wonderful verses on the still more wonderful "One-hoss shay."

"THE ONE-HOSS SHAY."

Have you heard of the wonderful one-hoss shay,
That was built in such a logical way,
It ran a hundred years to a day,
And then of a sudden it—ah ! but stay,
I'll tell you what happened without delay :
Scaring the parson into fits,
Frightening people out of their wits—
Have you ever heard of that, I say ?
Now, in building of chaises, I tell you what,
There is always somewhere a weakest spot—
In hub, tire, felloe, in spring, or thill,
In panel, or crossbar, or floor, or sill,
In screw, bolt, thoroughbrace—lurking still,
Find it somewhere you must and will—

Above or below, or within or without,
 And that's the reason, beyond a doubt,
 A chaise breaks down, but doesn't wear out.
 But the deacon swore (as deacons do,
 With an "I dew vum," or an "I tell yeou"),
 He would build one shay to beat the taown,
 'N' the keounty 'n' all the kentry raoun';
 It should be so built that it couldn' break daown.
 "Fur," said the deacon, "'t's mighty plain
 That the weakes' place mus' stan' the strain;
 'N' the way to fix it, wy, I maintain,
 Is only jest
 T' make that place uz strong uz the rest."
 So the deacon inquired of the village folk
 Where he could find the strongest oak,
 That couldn't be split, nor bent, nor broke—
 That was for spokes, and floor, and sills;
 He sent for lance-wood to make the thills;
 The cross-bars were ash, from the straightest trees;
 The panels of white-wood, that cuts like cheese
 But lasts like iron for things like these;
 The hubs of logs from the "settler's ellow,"
 Last of its timber, they couldn't sell 'em,
 Never an axe had seen their chips,
 And the wedges flew from between their lips,
 Their blunt ends frizzled like celery-tips;
 Step and prop-iron, bolt and screw,
 Spring, tire, axle, and linchpin, too,
 Steel of the finest, bright and blue;
 Thoroughbrace, bison-skin, thick and wide;
 Boot, top-dasher, from tough old hide
 Found in the pit when the tanner died.
 That was the way he "put her through."
 "There!" said the deacon, "naow she'll dew."
 Do! I tell you, I rather guess
 She was a wonder, and nothing less!
 Colts grew horses, beards turned gray,
 Deacon and deaconess, dropped away,
 Children and grandchildren, where were they?
 But there stood the stout old one-hoss shay,
 As fresh as on Lisbon earthquake day!
 Eighteen hundred, it came and found
 The deacon's masterpiece strong and sound.
 Eighteen hundred increased by ten,
 "Hahnsum kerridge" they call it then;
 Eighteen hundred and twenty came,
 Running as usual, much the same;
 Thirty and forty at last arrive,
 And then come fifty and fifty-five.

First of November—the earthquake day—
 There are traces of age in the one-hoss shay,
 A general flavour of mild decay,
 But nothing local, as one may say;
 There couldn't be, for the deacon's art
 Had made it so like in every part,
 That there wasn't a chance for one to start.
 For the wheels were just as strong as the thills,
 And the floor was just as strong as the sills,
 And the panels just as strong as the floor,
 And the whippetree neither less nor more,
 And the back cross-bar as strong as the fore,
 And spring, and axle, and hub encore.
 And yet, as a whole, it is past a doubt,
 In another hour it will be worn out!

First of November, "fifty-five,"
 This morning the parson takes a drive.
 Now, small boys, get out of the way!
 Here comes the wonderful one-hoss shay,
 Drawn by a rat-tailed, ewe-necked bay.
 "Huddup!" said the parson; off went they.
 The parson was working his Sunday's text,
 Had got to fifthly, and stopped perplexed
 At what the—Moses—was coming next.
 All at once the horse stood still,
 Close by the meet'n'-house on the hill.
 First a shiver, and then a thrill,
 Then something decidedly like a spill;
 And the parson was sitting upon a rock,
 At half-past nine by the meet'n'-house clock,
 Just the hour of the earthquake shock!
 What do you think the parson found,
 When he got up and stared around?
 The poor old chaise in a heap or mound,
 As if it had been to the mill and ground!
 You see, of course, if you're not a dunce,
 How it went to pieces all at once;
 All at once, and nothing first,
 Just as bubbles do when they burst.

O. W. H.

Having spoken so much about coaching, I do not think it is out of place to make some remarks about coach-building; as there are some owners of carriages and gentlemen who are fond of driving, who, I should

imagine, would feel interested in knowing something of their construction, which knowledge, I feel assured, will be of service to them in more ways than one.

Before a carriage is put in hand careful drawings have to be made of it to scale, and although the designing of a carriage does not necessitate any very profound mathematical knowledge or calculations, yet carriage architects, when scale-draughting, require to do their work very carefully and skilfully. In addition to a reduced drawing, full-sized diagrams have frequently to be made in chalk on a blackboard, for the workmen to work to ; these are placed up against the wall so that the various timbers used in the construction of the carriage may be compared with such drawings.

As a carriage is composed of various parts, and as all these parts must exactly correspond with one another, it is absolutely necessary that a working draft of the full size be completed before a carriage can be made.

In the first place, it depends upon the construction of a coach what difference will be required betwixt the heights of the fore and hind wheels, to bring the perch to a proper level ; the depth from front to back of the body ; and the height which it is to be hung from the ground is next required, in order to ascertain the proper length of the carriage, that is, what distance the fore and hind axle-trees are to be from one another ; the particular manner in which the body is to be hung upon the carriage must also be fixed, in order to give the springs a proper degree of curvature. To obtain these particulars a draft is made of the entire machine, and from it the master-coachbuilder at once sees what effect will be produced. In making these drafts, the coach-builder is limited, in a certain degree, by the fashion

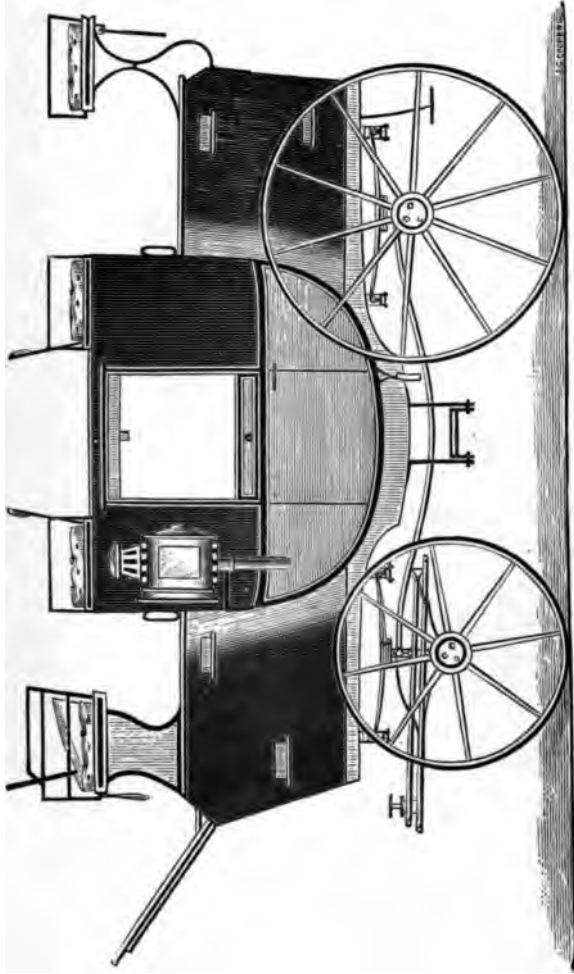
of the day ; at the same time he has it in his power to display taste and judgment in the construction. His object should be to combine elegance with strength, and that one part of the vehicle shall be so in character with another, that the carriage shall not want anything that it ought to have, and not have anything that it could do without. He, also, has to be careful not to make any part heavier than absolutely necessary, and must be particular to make it easy of draught, by having the best finished axles set in such an exact manner, that the wheels may run perfectly free, following one another in the same track.

There is no earthly reason why a gentleman of education and intelligence, who is fond of driving, and passes much of his time on the box, or the bench, as it used to be called, should not make a study of carriage-building, just in the same way as the owner of a yacht acquires a knowledge of yacht-building. I even knew an Admiral, who, when in command of the Channel Squadron, expressed a very strong wish to be thoroughly acquainted with iron ship-building and marine engineering ; and it appears to me that when one passes so much of one's time making use of a particular thing, or having anything under one's entire charge, it is only natural and creditable that one should manifest some anxiety to become acquainted with its construction. In the event of any accident happening on the road or a carriage being out of repair, an owner would benefit considerably if he possessed some knowledge of coach-building ; besides which, a coach-builder's account is, to any one not initiated into the mysteries of coach-building, as difficult to understand as a house-builder's account ; in both cases it appears as

though the tradesman had taken refuge behind ramparts bristling with technical terms through which it is impossible to force a passage. Supposing that a gentleman's superintendence of the building of his carriages went no further than to execute the design, it might at least go so far; he might make a scale-drawing of the carriage he intends building—one-half inch to the foot is generally the scale upon which carriages are draughted. Most of the carriages one meets with originate in a drawing to scale, and are then transferred to the blackboard in full size; those that do not so originate are merely copied from existing patterns. No coach-builder having an excellent pattern of any carriage in ordinary use upon which it is impossible to make any improvement, would make new drawings when the old ones which he already had by him would answer the purpose in view, consequently all the big coach-builders turn out numberless carriages on exactly the same pattern, the only difference in these carriages being, that each is painted, lined, and trimmed, to suit the taste of their customers, who are frequently forced to make use of a particular colour, it being one which their family have made use of for many generations; this is called a family colour, and all great families, it may be observed, have such a colour, just as their servants wear the same livery. And I may further remark that even if one possesses no obligation to make use of a certain livery, or a particular colour in one's carriages, nothing looks worse than to see a variety of colours in one's coach-house, or to see a gentleman driving a blue carriage one day, and a green one the next, whilst on the third day he seats himself in a carriage

with yellow body and red wheels. This can be made still more ridiculous if the liveries of the coachman and footman on the box are not in character one with the other. But to apologise for this digression, and to return to the A B C of coach-building, and what is necessary for the execution of a drawing, it must be remembered that before a drawing to scale can be made suitable to work to, it is necessary that the carriage architect provide himself with suitable drawing instruments, a properly constructed drawing-board, and all the necessary paraphernalia of a draughtsman. In executing a diagram to scale of a carriage, the elevation is drawn, commencing from a horizontal line, this is the first scale-draught ; there is also a process called French, or square rule, where not only the elevation of the carriage appears, but also the laying-out of the under-carriage in the form of a plan, which gives the circle described by the wheels when turning ; although this is not always the case, the wheels are frequently left out, but the elevation of the body and the plan of the body are frequently draughted in these diagrams. What is called the working-draught is similar to the last-mentioned plan, and the drawing on the blackboard differs from these in no respect save that the drawing is now to the full size.

The different branches of coach-building as commonly practised are : Wheel-making, carriage-making, (which means the under-carriage), and body-making, which includes smith's work, painting, and trimming. The carriage, as already described, is the framework which is necessary to support the body, or shell, of the machine ; this branch is considered next in importance to the body-making, and, in fact, in the knowledge of these two may be said to consist the art of coach-making.



A FOUR-HORSE COACH BY MESSRS. SHANKS, COACH-BUILDERS, OF GREAT QUEEN STREET, LONDON.

[To face page 365.]



Coaches are made in three sizes. The heaviest four-horse stage-coach, such as would be used for passenger traffic, weighs about 22 cwt.; the weight of a full-sized private coach, built with a view to lightness, is about 19 cwt.; and the weight of the smallest coach made is from $17\frac{1}{2}$ to 18 cwt. English ash is used for the framing of all coaches; Honduras mahogany for the panels, and pine for the roof, floor, and divisions. The usual height of the front wheels is 3 feet 4 inches, and the height of the hind wheels 4 feet 3 inches; they should be $28\frac{1}{2}$ inches apart. The set of eight springs should weigh about 250 lbs. The length from splinter-bar to after part of coach, in a full-sized coach, is 10 feet 9 inches, the height from the ground to the roof is 6 feet 11 inches. The tires of the wheels of a full-sized coach are $1\frac{3}{4}$ inches wide, and $\frac{3}{4}$ inch thick.*

The best kind of brake in my opinion to apply to a coach-wheel is one that you work with a circular handle in connection with a screw. This brake gives you enormous power, and the wheel which you touch to set it in motion is fixed close against the driving-seat. Such a brake was made in St. Petersburg for Prince Bariatinsky, and is fitted to a small coach which a very short time ago was standing at Messrs. Holland's coach-building establishment in Oxford Street. The English brake is very good, but, unless made strong, the lever sometimes gets bent; besides which, by the use of a screw instead of a lever, one can exert a much greater mechanical force.

* This information was supplied to me by Mr. Kesterton, who now presides over the business of Holland & Co., Oxford Street, London, who have a world-wide renown for the excellence of their coaches. With Mr. Kesterton I have been acquainted for now more than twenty years, and am well aware of his experience in the highest class of coach-building.

The pole of a coach should be made of carefully selected ash, 9 feet long from splinter-bar, and $4\frac{1}{2}$ inches deep at butt. A pole should always be stout and strong, since the safety of the carriage to which it is attached is entirely dependent upon it. Sometimes it is well to strengthen it with iron, but if this is done, care should be taken that screws do not enter the pole, and so weaken it. The iron might be attached to the pole by one or two thin bands encircling it. Captain Cooper, when he had the Box Hill coach, was so anxious to possess a light coach that he did all he could to dispense with iron and reduce the weight, the result of which was that his pole broke going down the hill close by Burford Bridge, and he met with a serious accident.

When a pole breaks there are only two things to do: one is to apply instantly a powerful brake to the wheels, if you have such a thing fitted to the coach, the other is to keep your wheelers going, so that they may remain in front, and not be overrun by the coach. No one can say exactly how one would act under such circumstances; if the pole were merely to break, and the horses were to behave like lambs, there is no doubt that a good coachman would surmount the difficulty; but it must be remembered when a pole breaks the foremost end of the pole falls to the ground, and the bars and broken piece of pole dangle about the leaders' heels, and hit their hocks; naturally such an alarming condition of things frightens them out of their wits, and makes them run away. It should always be remembered that the pole, and the axle, and connections with the wheels, are the parts upon which the safety of the coach and its occupants.

most depends ; for a coach the axle should always be mail axles, and not Collinge's patent axles.* Every coach should have a perch ; a coach without a perch not only looks bad, and is depriving the carriage of much of its style and character, but it is absolutely necessary to comfort and safety ; it binds the after part of the carriage to the fore part, and prevents the pole jumping about when passing over bad roads, and so assists the draught.

The hind wheels should always be made high, as this also assists the draught. "The old post-chaises," Mr. Kesterton says, "which were used on bad roads, and often with very inferior cattle, always had very high hind wheels, which, when once in motion, acted like the fly-wheel of a steam-engine, and helped them along."

It must be remembered in speaking about poles, it is not always on descending a hill that they break ; sometimes on turning the coach round they will break, at such a moment there is a considerable strain on the end of the pole.

It will be remembered that I gave an extract from the *Sporting Gazette*, which stated that a coach was capsized at Queen's Gate, whereby the occupants were thrown off and a lady was injured ; this was owing to the breaking of an axle.† The iron-work about a coach should be made very strong and particularly the axles. I recollect, about twenty-three years ago, staying at Bognor, with two youngsters of my own age. We took a house for the Goodwood week, and I drove

* Iron coach axles are generally bedded in the wooden axle ; this improves the appearance of the under-carriage, and makes it look what it is intended to be—a four-horse coach, not a drag.

† See page 333.

them daily, in a tandem-cart, to the races ; but on the very first day, just as we were approaching Chichester with the horses trotting well up to their bits, suddenly the axle of my cart broke ; we were not capsized, as would have been the case with a coach, but sank down gracefully all of a heap on the road, whilst the two wheels flew upward, breaking away the patent leather wings, but with no further ill effect. I had the cart conveyed on a trolley into Chichester, where a coach-builder fitted me a new axle ; but had this not occurred on a level road the consequences might have been serious.

But to return to coach-building. In coach-building there is a combination of crafts, such as are rarely united in any other trade, except it be ship-building ; for a ship-builder not only builds the vessel, but frequently finishes it throughout, even to furnishing it and supplying the most insignificant article of upholstery.

The technical names of those trades which are comprised in the different branches of coach-building are body-makers, carriage-makers, wheelers, spring-makers, axle-makers, smiths, trimmers, etc. ; painting is an important part of the business, and those professing it are divided into body, carriage, and heraldry or ornamental painters ; these workmen have each their own department in the construction of a coach.

The timber employed in coach-building comprises ash, beech, elm, oak, mahogany, cedar, deal, pine, larch-wood, and birch ; but the timber most employed is English-grown ash ; the hedge-row ash growing in open spots is of slower growth, but is much firmer, stronger, and tougher, than that grown in the coppice, and is, therefore, preferred to it for making the heavy framework of a carriage. Ash is rather a tough and

fibrous than an elastic wood, and is well calculated to bear the concussions to which the supporting framework of a coach is exposed ; it is best fitted for use when arrived at maturity, but before it has attained its extreme size. It is sometimes white at the heart, sometimes red ; the former is best suited for the purpose in view. It is sometimes so wrinkled and twisted in the grain as to render it almost impossible to plane it out smooth ; but it is then in its toughest state, and it acquires by boiling or steaming a plastic property, which enables it to be bent to a form suited to carriage timbers. These various qualities, together with the absence of any tendency to warp or twist, render ash better fitted than any other kind of timber for the skeleton framework of a coach.

Elm is used sometimes for strong planking ; of the two kinds hedge-row elm is more employed than wych elm. The grain of this wood is curly and wavy, difficult to work, brittle, and apt to split ; but, when once brought into workable form, elm possesses great strength, especially for the naves of wheels. Oak is not employed to any considerable extent in coach-building, yet it forms the spokes of wheels. The nave, a cylindrical block of wood into which the spokes are fitted, is sometimes of elm and forms the centre of the wheel ; it is pierced longitudinally with a hole to receive the axle. The spokes are, of course, the radiating arms framed into the nave at equal distances, and the felloes are circular segments framed or fitted on to the outer extremities of the spokes and forming collectively the periphery or rim of the wheel.

The first thing to be considered is the wheel. Each felloe has at least two spokes ; felloes are sometimes made in one piece of wood which is bent into a

complete circle by means of steam ; wheels made in this way are preferable in appearance, but the difficulty of repairing them has prevented their being brought into general use. The external surface of the felloes is protected by a covering of iron called the tire. The spokes standing at right angles with the axle are adapted to meet the lateral shocks to which a carriage-wheel is exposed. The spokes are usually formed of oak saplings and are wrought into proper form after being driven into the nave ; the nave is protected at either end by this hoop of iron called the tire, to enable it to resist the strains of the spokes. In ordinary hind coach-wheels there are generally fourteen spokes, and in the fore-wheels, which are about a foot lower, there are usually only twelve spokes.

The tire is put on the wheel when expanded by heat, but as soon as the iron hoop is fitted into its proper place round the wheel, water is thrown upon it to prevent the wood-work from catching fire, and the result of the sudden contraction of the hoop or tire is to compress the felloes and to force each spoke into its proper place, so that when complete, the wheel is admirably adapted by its combined strength and elasticity for the purpose for which it is designed. The tire is further secured, after cooling, by a few small bolts driven through it and the felloes, and riveted inside the latter.

But to speak once more of timber employed in coach-building. Mahogany is chiefly in request for forming the panels or broad plain surfaces of the body of a coach ; it always seems a great pity that such a beautiful wood as mahogany should be concealed by paint. It is a mere question of fashion and habit. We have grown so accustomed to painted carriages that

if the wood were unpainted or unvarnished, no matter how well it might be prepared, or how beautiful the grain might be, or how choice the specimens of wood employed, a carriage built after such a fashion would not be tolerated for a]moment. An endeavour was once made to varnish and not to paint the hulls of yachts; the *Witchcraft* belonging to Mr. Broadwood, the great piano manufacturer, was a striking instance of this innovation. I remember the outer skin of the vessel above water was built of mahogany, which, when newly varnished, looked very well, but did not retain its brilliant appearance long, and was afterwards painted; but this was no doubt owing to exposure to weather, salt water, and boats constantly scraping against the side. I remember the vessel was nicknamed the "Musical box." The same objections that applied to the yacht cannot apply to carriages. Carriages are carefully housed, and receive an amount of attention which it is impossible can be devoted to the outer surface of a yacht or a boat. In the use of mahogany, there is a difference between the cabinet-maker and the coach-builder; the former prefers Spanish mahogany on account of the beautiful curled grain, which gives such diversity of light and shade, whereas the latter employs Honduras mahogany, because the curled grains of the Spanish prevent it from being bent into the curvatures required in coach-making. Honduras wood can be procured in planks four feet in width, perfectly straight-grained, and free from all knots and blemishes, and is therefore a kind of timber well suited for bending, and therefore well adapted to coach-building. Cedar of considerable width and having a coarse grain is sometimes used instead of mahogany for carriage panels, but

it is really too porous to receive a painted surface properly. Deal is employed for the flooring of carriages. Wide American pine cut into very thin boards is used for roofing. Fustic, a hard, yellow wood obtained from Central and South America, is sometimes employed for the naves of wheels which are intended for hot climates, as being less likely to shrink than English timber. Lance-wood, a yellow, close, straight-grained, elastic but brittle wood, is much used for the straight shafts of carts ; but for curved shafts of Stanhope gigs and four-wheeled carriages it cannot be employed. American birch is much used for flat boarding on account of its great width, its homogeneous character, its freedom from rents, the smallness of its pores, the readiness with which it yields to the plane, and the non-appearance of the grain when painted. It is, however, brittle, and cannot be bent like mahogany for panels. Sycamore, chestnut, and plane-wood are occasionally used as substitutes for some of the above-mentioned woods.

Timber employed in coach-building is dried in a drying-kiln. Mr. Parsons, the proprietor of the common-sense drying-kiln, speaking at a meeting of the members of the Institute of British Carriage Manufacturers, describes the effect produced upon wood subjected to the process of drying in the above-mentioned kiln. "Here," he said, "is a piece of persimmon, which was originally $1\frac{7}{8}$ inches thick ; it is now reduced to $1\frac{1}{4}$ inches thick. Here is a piece of stone-wood, originally $1\frac{3}{4}$ inches thick ; it is now $1\frac{1}{4}$ inches thick. Here is a piece of beech, that was 2 inches thick ; now it is $1\frac{1}{4}$ inches thick."

This system of drying timber gets rid of all the sap and seasons the wood at the same time. The

machine steams the timber, dissolves the sap, and sucks it from the centre. The blocks exhibited were exposed to a pressure of 15 tons to the square inch. The weight was increased so much in proportion to the size that compressed beech exceeds box-wood in specific gravity. The wood that has been submitted to this process resists all attempts to split it in two.

Mr. Bennett, a timber-merchant of Canada, who was present at this meeting, said that "Bass-wood would be suitable in cases where mahogany was used at the present time in coach-building. American rock-elm," he said, "was superior to English elm, on account of its being free from knots and blemishes of any kind." He went on to say that "Canadian timber could be seasoned ninety days after being cut, owing to the dryness of the air in Canada."

There being so much to be said in favour of Canadian timber, it naturally follows that our English coach-builders employ it largely in the construction of carriages. Hickory has been largely employed for wheels, and, owing to its elasticity and strength, has made a very favourable impression upon the coach-builders of this country when used for light wheels. As has been explained, for bodies and under-carriages, and especially for poles, no wood seems to equal the English hedge-row ash for toughness and durability; full-grown wood is best suited for this purpose. The lower part of the body of a coach is panelled up with the softest bay mahogany; ash is used for the felloes of wheels, but beech felloes are often used, and it has been found by experience, that beech, when cut into felloes from the log shortly after it is felled, and kept until they become dry before being framed into wheels, answers admirably for this

purpose ; indeed, nothing but properly-seasoned wood can be applied to any purpose in the construction of a coach.

In working up these varieties of timber, tools and processes are employed similar to those witnessed in many other trades. In the first place, a mould of the coach-body is prepared from the pattern, as in, the preparatory stage of ship-building ; that is, thin pieces of wood are so cut out as to denote the size, form, and curvatures of all the separate parts of the coach, and these afterwards act as guides in cutting and shaping the timber. The working operations are of two wholly distinct kinds, carried on by different sets of workmen : one relates to the body, and the other to the under-carriage, or that part below the body.

In bending thin pieces of timber to form curved panels, the wood is wetted on the side which is to be convex, and heated on that side which is to be concave ; the unequal expansion of the two surfaces, or rather the expansion of the one and the contraction of the other, produces the curvature, and it is the workman's business to secure this curved form when once obtained. With a few exceptions, the process connected with coach body-making may be regarded as very similar to those of cabinet-making.

In the making of the carriage which supports the body the flat surfaces are so few in number that the plane is scarcely employed ; after the saw the chief cutting instrument is a hand tool resembling a spoke-shave. The complexity of the framework, and the number of pieces which compose it, depend a good deal on the circumstance whether the carriage has four wheels or only two, and whether drawn by one or two horses.

But, to commence at the lowest point in the car-

riage, it is necessary again to speak of the wheels ; and although I have done so before, I did not fully describe their construction. Carriage-wheels, in their manufacture, require the greatest ingenuity ; they must have a degree of elasticity sufficient to bear the strains that they are subjected to when in motion. The simplest shape in which wheels for carriages could be formed would be that in which the spokes would stand exactly at right angles with the axle, and would form a flat or plane figure when the wheel is viewed edgewise, but such a wheel would be ill adapted to meet the lateral shocks to which a carriage-wheel is exposed. The more common form is that called the dished wheel, in which the centre or nave is made to fall back a little from the plane of the felloes, so that the face of the wheel is not flat but slightly concave ; the elasticity of this form is a very great recommendation. It possesses, also, this advantage, that if the axle be slightly bent downwards towards its extremity so as to bring the spokes of the lower half of the wheel into a nearly vertical position which will enable them to bear the greatest possible weight, the upper half of the wheel will have such an inclination outward as to leave more room for the body of the carriage, and to throw particles of dirt caught up in its revolution away from it. Very strong wheels are occasionally made in a double dished form, or with the spokes alternately inclining outward and inward from the felloe, so that the centre or nave of the wheel forms the base of a pyramid of which the felloe forms the apex ; but such wheels are deficient in elasticity and consequently will not bear much concussion. The dished form of wheel, together with the bending of the axle, involves some increase of actual friction, as it cannot possibly roll in a straight line without a degree of rubbing

friction most injurious to the road, and which also increases the draught.

The ordinary mode of making a coach-wheel is as follows: The piece of elm for the nave is turned in a lathe to the proper size and shape, and has a hole driven through it to receive the axle; it is then fixed in a vice and holes are chiselled out of it to receive the ends of the spokes. There is nothing but the practised eye of the workman to guide him in making these holes in the proper position for producing the dishing of the wheels; half of the spokes are near one end of the nave, and half near the other, and the holes have to be regulated accordingly. The pieces of oak for the spokes are shaped by hand, by a small cutting tool called a spoke-shave; every one who is acquainted with carpentry or joinery knows what a spoke-shave is like, and there is no carpenter or joiner who does not make use of one frequently in his trade.

In wheels the felloes are dowelled together, and are further secured by inserting wedges in the ends of the spokes, and by the iron tire. It is undoubtedly a fact worth recording, and it has been proved, that iron tires of a narrow width, when passing over bad roads, whose surface is soft and impressionable, sink deep into the ground, get wedged into ruts, from which the horses have to drag them, which without doubt increases their labour, and greatly fatigues them. In every case it should be remembered that large wheels possess an enormous superiority over small wheels, not only when considered mechanically, as acting like a lever to overcome obstacles that retard progression, but their friction upon the axle is far less than small wheels, since they turn less often; at the same time the weight upon them is

equal, though in the larger wheel it is more distributed. The bearing of a large wheel preponderates over the bearing of a small one, and the arc of the circle which meets the surface of the road being greater, it would not sink so deep; the large wheel would also have the advantage over the small one in rising over eminences. A wheel of eight feet diameter surmounts an obstacle twice as easily as one of four feet; if it requires a certain power to draw a carriage of a certain weight over a certain obstacle with wheels of any given diameter, it will require wheels of four times that diameter to draw the same carriage over the same obstacle with half that power. And yet, it has been inferred that, supposing the friction of two carriages of equal weight, but of different-sized wheels, to be equal, the low-wheeled one would be drawn up hill, on a smooth plane, much more easily than the high-wheeled one, though on a smooth, horizontal surface the latter would be drawn more easily than the former. On the contrary, on going down hill, the high-wheeled carriage will be urged forward by its relative gravity more than the low-wheeled one, consequently low-wheeled carriages are preferable to high-wheeled ones in a hilly country, both for going up hill and down hill. This has been proved with bicycles: where hills have to be ascended and descended, a small wheel has an advantage over the big one. Were large wheels made experimentally and attached to a carriage for the purpose of being driven, were the axles to be raised above the breasts of the horses, they would have to draw downwards, and would, in consequence, be incapable of exerting their utmost strength; with small wheels the axle would, being low, increase the draught, in consequence of the horses having to draw upwards. And yet, so far

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as the bearing of the collar is concerned, a horse can draw from a low splinter-bar with far greater comfort than from a high one.*

The strong iron which extends across and beneath the wood-work of the under-carriage, is, as every one knows, called the axle-tree; the round parts at each end, on which the wheel runs, are called the axle-arms; the nave of the wheel is pierced through the centre with a large hole to introduce the box or iron tube, for the axle-arm. It has frequently been proposed to make metal naves, or centre pieces for wheels; the objection to this was that if the wood of the spokes were to shrink, they would become loose in the mortises, whereas a wooden nave would shrink at the same time with the spoke.

The word axle-tree was evidently derived from the fact that axles used to be made of wood, the stem of a tree being frequently employed for the purpose. The axle-tree and box most in use for light carriages is "Collinge's Patent Cylindrical Axle-tree and Box." These axle-trees have been a considerable time in use, and their advantages have been proved in the length of time they wear, in the silent and steady motion they preserve to the wheels, in the advantage of retaining the oil to prosecute a journey of two thousand miles without being once replenished; and lastly, they are very durable and but little subject to be out of order. The axle-tree arm is made as perfectly cylindrical as possible and of a peculiar hard substance; the middle of the cylinder is reduced, to contain the oil necessary to feed the axle-trees, so that

* But to meet these objections a middle course should be adopted, and regard should be had to the shape of the horse's shoulder. The collar should rest on the scapula or shoulder-blade, and should there have a firm bearing.

the two bearings are at the two ends of the axle, which has an internal shoulder, against which the inner end of the wheel-box takes its bearings. Behind this shoulder is a deep groove for a washer to preserve the oil and prevent noise in its use ; also a hollow box on the outer end of the axle-tree arm. The middle portion of the axle-arm is greatly reduced, so that between it and the inner portion of the box there should exist a space containing oil for lubrication. The extreme end of the arm is double screwed, to receive two nuts for securing the wheel ; the one screw turns the way of the wheel, the other the reverse, and is meant as an additional security.*

The box is made of a very hard metal, nicely polished, and fitted to the arms, having a circular recess all round, at the end nearest the carriage, for containing a supply of oil. The box is longer than the part which bears on the axle, and the projecting part beyond the bearing at each end is bored out larger than the axle-arms.† In fact, the arm of the axle, which revolves in the box, has several shoulders and indentations. There are three spaces for oil : one cut in the box, and two in the arm. At the outer end of the arm are two nuts, and over all is screwed the cap, which is generally of brass.

Speaking of a wheel in a mechanical sense, it is, in

* One thing should always be remembered—that proper care and attention should be given to the box of the wheel, and to all those parts bearing on the axle-arm. Every foreign substance that increases friction should be carefully removed with a sponge, after which all the working parts should be thoroughly lubricated with the best oil, by which means draught will be lessened to an extraordinary degree.

† It is considered by coach-builders of the present day inadvisable to groove the box as a receptacle for oil, it is considered best to make a recess on the top of the axle-arm as a well to contain the lubricating oil, as the axle-arm does not rotate but is stationary ; whereas the box, being fixed in the nave, revolves with the wheel.

fact, a lever where the power is made to act continuously ; by the revolving of the wheel, a number of levers of the first class are continually brought into motion ; as the radius of the wheel exceeds that of the axle so it increases in power, and so increases the distance that the operative force has to pass through. A large wheel, when set in motion, exercises a centrifugal force, the axle being the basis of its operations, and the tendency to the motion described being increased with the diameter of the wheel.

Several attempts have been made to provide high wheels for the fore body of a four-wheel carriage as well as for the hind body, but the difficulty has been to lock the carriage round. In a four-wheel carriage there is an axle connecting the two fore wheels, and another connecting the two hind wheels, but if these two axles were so fixed as to remain constantly parallel the carriage could not turn. In practice the front axle is made to turn upon a pivot, and the wheels connecting it are made small enough to go under the frame of the carriage during the act of turning. It is for this reason, and this alone, that the front wheels are made smaller than the hind ones, and as a great disadvantage in draught is thereby occasioned, various contrivances have been adopted for rendering the use of somewhat larger wheels practicable.

Sometimes the body of the carriage is raised to a greater height ; sometimes a portion of the under part of the body is cut away to leave room for the turning of the wheel. It was as a means of remedying these inconveniences, that Mr. Adams proposed, a few years ago, the “æquirotal” construction of carriages, of which I will afterwards speak more fully.

As the inequality in the sizes of the fore and hind wheels is adopted solely as a means of enabling the

vehicle to be turned round, Mr. Adams sought for some mode of enabling this turning to be effected even when all the four wheels are of equal size. This he does by having the carriage so divided in the middle as to turn upon a pivot ; or, rather, the pivot or perch-bolt, which, in a common carriage, is placed immediately between the two front wheels, is, on the æquirotal principle, placed much further back, by which the fore wheels have so large a radius in turning, that they do not touch the body, and may therefore be made of equal size with the hinder wheels.

The mode of adjusting this pivot depends upon the kind of carriage. In a phaeton, which is an open four-wheeled carriage with two seats, the front one higher than the lower, the hinder half of the body is hinged to the front half. In a chariot or a coach, the coach-box is connected with the framework of the front wheels, and the body with that of the hind wheels, and there is a pivot which connects the two halves together ; the late Duke of Wellington had a carriage of this kind.

The only means, with which we are acquainted, of placing heavy loads in such a position that they may be conveyed with rapidity along a high-road, is to support the vehicle which contains them upon wheels. The advantage of a wheeled carriage over the common sledge is too obvious to require explanation.

Before quitting the subject of wheels, I would observe that some time ago a patent was obtained for making the felloe of a wheel all in one piece, a method which had long been in practice in the North, and of which I have spoken elsewhere. The plan consisted in selecting a beam of the proposed size of the intended felloe, and boiling it in a bath of water until the wood became reduced almost to a pulp, when it was bent in

a cylinder of the diameter of the intended ring of the wheel, after which it was shaped, mortised, and fitted to the spokes as before described ; such kind of wheels are still made, but the boiling process greatly weakens them, hence wheels so made are not much in common use ; they are, however, neater and look much better than any wheel which can be made by the common method ; the drawn iron tire is always made use of for such wheels.

The boxing of a wheel and adapting the axle-tree, is done usually by the coach or tire-smith. The box for a wheel consists of a hollow, conical tube of iron, furnished on its outside with two or three square projections, which have the effect of giving it a key when mortised through the nave of the wheel. The box is well polished on its inside, and the axle-tree is accurately formed to fit into it, with sufficient play to admit of oil being introduced to modify the friction.

The external ends of axle-trees, which pass through the boxes, are generally formed into screws to which are adapted nuts of sufficient size to cover completely the external edges of the boxes of the wheels, which, with a linch-pin that passes through the axle-tree arm, completely secures the wheels to their work. The screws upon which the nuts are fitted are cut reverse ways.

The mail axle is of a different construction, and owes its safety to four bolts, which pass completely, first through the iron shoulder on the axle,* and then through the nave of the wheel and the outer plate, these bolts having a square shoulder on the inside of the nave, with screws and nuts on its front. The box is made like other boxes, except that it and the nave are completely covered at their outer end with a solid and broad cap of iron. The axle-tree, too, is formed to fill

* This iron shoulder, of course, revolves into the nave.

the box and press up close to this iron cap. The round iron shoulder is made and welded to the solid axle-arm ; this shoulder works in the box of the nave. This and the outer cap have four perforations, through which the iron bolts are driven, and which also pass through the nave of the wheel with their screws presenting themselves through the iron cap at its outer end. When these bolts are all adapted and in their place, four nuts, of about an inch and a quarter square, are screwed on to them ; the shoulders of which are supplied by the iron cap which secures the axle-tree in the box, and holds up the wheel more firmly to its work than any other plan now adopted. By this method no dirt can penetrate to impede the motion, or create friction, as the end of the cone of the working axle is completely enclosed, and when once the wheel is put on and properly oiled, it is found to go on in its work for a considerable time. This axle is the celebrated "mail axle," which is used in all coaches, mail phaetons, and properly built Stanhope gigs ; and, of all axles that have been invented, none is stronger, less likely to get out of order, or more drag-like in appearance. This, and Collinge's patent axle, are about the only two axles in general use. There are three parts in the axle, the two arms which pass into the naves of the two wheels, and the bed or centre part which connects the two arms. It is partly on account of the ingenious way in which lubrication with oil is effected, that Collinge's patent axle is so much employed. Besides the mechanism for connecting the axle with the wheel, there is the little cup for holding oil, and as the wheel rolls along, the oil is pumped or drawn out of its receptacles, and made to lubricate the adjacent surfaces. It must be understood that there are three kinds of axles in existence ; these are the common or plain axle, the

patent mail-coach axle, better known as the mail axle, and Collinge's patent axle,* which last, when properly made, is found to be the best for retaining the oil, as it is in good order, in this respect, after a journey of five hundred to six hundred miles, or even further.

The carriage, as technically understood by coach-builders, means the framework upon which the axle-trees and springs are fixed.

The carriage-maker, although not required to finish his work with that delicacy which is indispensable in the body-maker, has nevertheless to put together his joints with great precision and firmness, as the strength and durability depend upon the carriage, for it undergoes more fatigue and is therefore liable to fail sooner than any other part, the wheels only excepted. For this reason the best seasoned wood must also be made use of in this branch, that none of the joints may shrink. In fitting the various iron plates and stays, great care must be taken that they be properly set to the required curves, and that their bearings be quite correct before being fastened; as otherwise by the force of the bolts in screwing them on, the wood-work would be twisted, and thereby not only disfigure the appearance of the parts, but materially weaken them. Smiths in general are so little aware of this that the carriage-maker has often more difficulty in getting his iron-work made perfect, than in executing his own more particular department. The carriage is always made of ash of the strongest growth, and perfectly dry, that is, free from sap and other moisture. The joints are put together with white lead ground in oil, secured with bolts and iron plates, stays, hoops, and other iron-

* But the common axle is only used on the very commonest and cheapest wheeled vehicles. It consists merely of an axle-arm, linch-pin, and nut.

work to the weight of from 230 lbs. in a light carriage to 370 lbs. in a heavy one, exclusive of axle-trees and springs.

In fact, carriages, as they have been made for many years past, are in every part a combination of wood and iron, in order to produce a light appearance ; the workmen being enabled, from the additional strength of the iron, to reduce the dimensions of the wood.

The springs are made fast to their respective bars with screwed bolts, and the fore or under-carriage is secured to the main carriage by means of a strong iron bolt, upon which the axle of the front wheels turns independently of the hind wheels, thereby enabling the whole carriage to turn with ease, which it could not otherwise do.

The next process is body-making. This is the making the wood-work of the body or shell, or that part containing the seat of every vehicle generally known by the name of carriage, whether open or close, and having either two or more wheels. This is considered the nicest branch of the art of coach-making, and very deservedly so ; for to understand it thoroughly requires knowledge rarely to be met with in the lower classes of artisans, besides an accuracy and delicacy in the junctions of the various parts, and neatness in finishing, which no other part of coach-making so particularly requires. The framework of the body is uniformly made of ash timber, the bottom (and roofs of close carriages) of fir, as being lightest, the panels of mahogany (sometimes walnut-tree), as fittest from its nature to receive the paint, and more pliable to take the curved form which is required ; the back and upper quarters are sometimes made of mahogany, but more frequently of fir. The joints of the framework

are all put together with white lead, ground in oil; and the junction of the panels with the framework is strengthened by small blocks of wood being glued to both, and strips of canvas glued at small distances from one another across the reed of the wood, all over the inside of the panels, reaching from the framework on the one side to the framework on the other. The curvature is given to the panels by holding to the fire, or to a piece of iron made red hot, the side which is required to be hollow, and by applying water to the opposite side, by which the one side is contracted and the other side is expanded. When brought by this means to the desired form, they are fixed into grooves, or laid down with glue upon the framework until dry, and then cleaned off; the door panels besides this are secured with plates of brass, attached firmly to the framework with screws. The utmost attention should be paid to use the best seasoned wood, as the smallest shrinking of any of the joints, or contraction of any of the panels after being painted, injures the appearance, although not always materially the security of the carriage.

There is a great variety of smith's work necessary in making a carriage, and as much dependence is put upon the iron-work, it must be not only of the very best quality, but worked in the best possible manner; this being the case, ordinary smiths are not, without a good deal of practice, fit to be employed by coach-makers, except in the coarser parts. In order to obtain as much perfection as possible in the execution of this branch of the work, it is subdivided into particular departments, some workmen being constantly employed in making springs, others at the axle-trees, others at the steps, some at the iron-work upon the wheels, some at the different

plates and stays for new carriages, and others at repairs upon old work of all kinds. The springs ought to be of steel of the best quality, well worked, and properly tempered, which is the chief art of the spring-maker. In spring-making there is a considerable nicety required in proportioning the thickness and lengths of the different plates, giving them an equal temper and proper set, in order to produce a regularly increasing resistance to any weight that may be put upon them. It is by these means that a carriage can be made equally easy to ride in with one person only, as with four or six.

The axle-trees ought to be built of different bars of iron, laid alongside of one another, and well welded together; for this purpose the tires which come off old wheels are preferred, and the thinner they are worn down, so much the better, as a greater number of plies are necessary, thus receiving a better mixture of metal, and, of course, greater uniformity and average strength.

The finishing of the axle-trees ought to be done with the greatest possible accuracy, as much of the ease of draught depends upon that circumstance, and as the greatest part of the noise made by carriages when in motion, proceeds from the axle-arms and boxes not having been properly fitted to one another. A considerable degree of correctness is also necessary in making the steps.

The variety of iron plates and fastenings requisite for a carriage is so great, that it would take too long, and occupy too much space, to describe them all; I shall, therefore, merely mention that almost every piece of wood in the carriage is supported by, or strengthened with iron, attached to the wood-work by bolts or rivets passing through both. A considerable degree of art

and practice is required in putting the tire or iron hoop round the rim of the wheels; the holes for the nails to fasten it to the felloes are first made, the bar of iron is then turned round and formed into a circle of the required diameter, and the two ends welded together; it is then heated all round red-hot, and the wheel being laid with its face (that is, the outside of the nave undermost) upon a flat piece of stone-work or metal-plate, the iron hoop, from the great expansion occasioned by its heat, goes easily round the wheel, the iron is then immediately cooled, and, by contracting, binds all the wood-work together; the nails are then put through the tire into the felloes, and the wheel being cleaned off, is finished. Formerly, the iron was, very generally, put round the wood-work of the wheel in separate pieces, having nothing to fasten it to the felloes except the nails; but this practice has become obsolete.

The sons of Vulcan are almost as active in the blacksmith's department of a coach-builder's establishment, as they are in those businesses where things constructed of iron are the sole articles of manufacture. Most of a carriage-smith's time is spent beside his forge and over his anvil. The principal tools that he requires are all descriptions of hammers, chisels, and punches, but it would occupy too much time to go into all the details of a blacksmith's work, who is employed in the construction of carriages; sufficient to say that he makes a great part of the under-carriage, the iron fastenings of wood-work, the steps, springs, lamp brackets, and wheel tires. The greatest care is needed in the iron framework of the under-carriage of a four-wheel carriage, which enables the fore part of a carriage to lock round.

There are numberless things which a smith has to

do besides those I have already named. Every part of a modern carriage is strengthened by iron stays ; the wings and dash have an iron framework, which is merely covered with leather ; there are the iron railings round the seats, the raised backs, the opening and closing heads of carriages, such as landaus, phaetons, victorias, and sociables, are more or less constructed of iron, which being covered with leather is not seen, except the iron stays which are observed on the outside, but which coach-builders have lately frequently dispensed with.

One of the principal things a smith has to construct are axle-trees ; these are now frequently made of Bessemer steel welded together. To be successful in welding steel axles, everything preparatory to the task must be attended to, as it is generally understood that steel is exceedingly difficult to weld. The smith has also to set his axles, so that the axle-arms may properly fit the box in the nave of the wheel. In all cases, and under all circumstances, the wheels should be ready for the smith before he welds up his axles.

Carriage-springs should occupy a great part of the smith's attention ; they are one of the most essential points in the construction of a carriage. All coach-builders gain their knowledge of what is requisite in a set of springs, suitable for a certain carriage, from experience, or from comparing it with other carriages to which they have fitted springs ; but no fixed rule to my knowledge exists, whereby a coach-builder may be governed in making springs sufficient to support any particular weight.

The fact of there not being any fixed rule decided by precise mathematical calculation, is rather a matter for regret, as carriages frequently suffer, as also do the horses who draw them, and the persons who ride

within or on them, from the insufficiency of strength in carriage-springs, or the foolish way in which they are adapted. There is one carriage in particular which suffers in this respect: this is a Stanhope phaeton or T cart, convertible into a waggonette. As a T cart, with only a light groom seated behind, the springs are quite sufficient; but immediately that it is converted into a waggonette, with seats sufficient to accommodate four persons instead of one, the springs are no longer sufficient to support the additional weight, and the discomfort of riding in such a carriage is apparent to all who have tried it.

In this case, in addition to the longitudinal elliptic springs, there should be elliptic cross-springs, or cross-springs of some kind running from one side of the carriage to the other. A carriage that rocks may be greatly benefited by cross-springs; good springs are perhaps the things most requisite to the comfort of those who make use of carriages. A coach-builder, to whose opinions I have referred, observes that to hold up a weight of 1500 pounds with three springs, that is with two elliptic longitudinal springs, and one elliptic cross-spring, on the American principle, it would be necessary that the three springs should weigh eighty pounds, there being four or five leaves or plates on each spring.

Carriage-springs should be very carefully tempered; it is necessary that the spring be carefully forged, not over-heated, and not hammered too cold. Besides springs, the smith has to hoop the wheels, that is, fit the iron tires round the felloes, thereby embracing the whole wheel; but this process I have already described.

I have by me a table giving the weight of elliptic springs, and the weight of common axles; but as these

calculations are of American origin, I decline to make use of them.

I am afraid that there has been a good deal of repetition in this chapter, but in referring to many opinions it is difficult to avoid a certain amount of repetition, particularly when comparing opinions expressed by others with that which I myself entertain ; besides which I have been anxious to lay emphasis upon certain points in connection with coach-building, more especially that which refers to wheels and axles. I wish the attributes of the two axles in general use to be thoroughly understood, for it is upon wheels, axles, and the pole that the safety of a coach mainly depends.

The common axle which I have referred to elsewhere, is not worthy of consideration when speaking of carriage-building, it being only used on vehicles of a very inferior class.

As regards springs it may be mentioned that they not only contribute to the comfort of persons driving in a carriage, but they also assist draught and lessen the fatigue of the horses employed to draw a carriage. Their object is to yield to the rise and fall of the wheel when passing over the inequalities of the road so that the body may not be affected by them, and that the concussion may be sensibly diminished ; in consequence of which the horses will go more at their ease, and not be made to suffer by constant jolts and jerks whilst they are exercising their powers in drawing the vehicle to which they are attached. There are many varieties of springs, but they may be comprised under two distinct heads ; first, those in which steel only is used as the elastic material, such as the ordinary elliptic and grasshopper spring ; and, secondly, those in which it is aided by leather straps as in the

C spring. The grasshopper spring consists of an indefinite number of plates of steel riveted together in the middle where the spring lies upon the axle-tree, and is attached to it by a clip ; one plate lies upon the top of the other, each one being gradually shorter than the one above it. They are ground to a thin edge at their ends so as to play freely upon the plate above ; by this arrangement the spring is much more lively than it would be if made in a solid piece, and it will bear greater weight without breaking.

The elliptic spring resembles two grasshopper springs greatly bent and one placed on the other, with their extremities terminating in eyes being united by bolts ; the axle is attached to the lower one and the body of the carriage to the upper one. C springs are made in the same way as regards the steel plates of which they are composed ; but these are bent into the form of the letter from which they take their name. The lower end of the C spring is attached by bolts to the under-carriage, the upper end having a leather strap or brace, which is attached to the body ; this spring is the easiest of all. Until lately it has been quite out of fashion except with heavy C spring barouches, but now it is gradually being applied even to small carts, buggies, victorias, and other light vehicles ; and as there is no other spring which is equally easy and quiet, it is gradually regaining its former position in public estimation.

Having said all we can about smith's work, we may now pass on to painting. The first process of painting the body of a carriage is to lay it all over with any common colour, in which a considerable proportion of japan and a little spirit of turpentine are mixed. Of this colour the body ought to get three or four coats, always increasing the quantity of turpentine

and diminishing the japan ; this is called priming for the grounding. After this two or three coats of filling up, or grounding, composed of powdered ochre, japan, and a considerable proportion of turpentine, must be laid on ; after having done this properly, if there are any holes above the heads of nails, or other small indentations in the panels, they ought to be filled up with white lead ground in turpentine and mixed up with jappanners' gold size. When all this is quite dry and hard, the painter, having flattened a piece of pumice-stone on one side, applies it with water to the panels, and by constantly and regularly rubbing them all over, produces a smooth, even surface. After this, the body is laid over with a colour, preparatory to that with which it is to be finished. If the colour is ultimately to be light, the preparatory colour must be light also, and the reverse if the colour is to be dark. In this part of the operation, which is called priming for the body colour, two or three coats will be necessary. When all these previous coats are quite dry, the body colour is laid over them, and it depends upon the particular colour and shade what number of coats will be necessary. One coat must succeed another until the colour is quite solid, that is, until there is no cloud or inequality of shade perceptible in any part of the whole. After this, the best copal varnish ought to be made use of, and a body cannot be well varnished without six coats, and seven if the panels are to be polished. Betwixt each coat of paint, the panels ought to be smoothed with sand-paper, and after each coat of varnish they ought to be well rubbed down with pumice-stone, reduced to a very fine powder, put upon a piece of woollen cloth, made up into a roll as hard as possible, and moistened with water, care being taken to smooth

the panels in this way as much as possible, without rubbing through the varnish. The body colour sometimes requires to be laid with varnish alone, and sometimes it is necessary to mix a little of the colour with the two or three first coats of varnish. To produce a better black, the upper quarters, roof, and back of the body are done with japan in place of varnish, immediately after the colour; and to render it capable of being polished, one or two coats of varnish are put above the japan. When armorial bearings or letters are to be painted upon the panels, the proper time is betwixt the first and second, or sometimes betwixt the second and third coats of varnish, after which such a number of coats ought to follow as will render the whole panels smooth over the arms, crests, or letters.

Panels ought not to be polished sooner than a month after the last coat of varnish is given them, and if the carriage is used during that time, or even for a longer period, before polishing, so much the better, the varnish by exposure to the atmosphere acquiring a harder consistency, and consequently becoming more susceptible of a fine polish.

The first operation in polishing is to rub down the panels as before described, with very fine pulverised pumice-stone and water, then after with purified rotten-stone, and afterwards by constant rubbing with the palm of the hand, using a small portion of dry rotten-stone to remove the gumminess off the skin. When by these means the panels are brought to a good polish, a little flour and sweet oil rubbed over gives a smoothness to the whole, and finishes the work.

In painting carriages, there is nothing particularly worthy of remark. The painter's chief care is to

remove all grease or oil from every part before he begins to paint, and as the work goes on, to smooth every coat with sand-paper before laying the next. In ornamenting the bars and wheels, everything depends upon the steadiness of the hand in drawing the lines clear and well-defined. The carriage, after being painted, ought to get two or three coats of varnish to give it a lustre corresponding with that of the body.

Next comes the process of trimming, which means the internal lining of the carriage. The trimmer's business is to cut the lining, give directions for sewing it, to arrange the lace properly upon the different parts, and, after being sewed, to stuff, quilt, and to fasten it into the body. This requires a considerable dexterity and neatness of hand.

Much of the comfort of a carriage depends upon its being well lined and stuffed; and as every part of it is immediately under the eye of the people within, if anything is left undone, or any error committed, it cannot escape notice, nor fail to give a bad impression of the whole machine. The trimmer has also in a close carriage to cover and finish the glass frames, blinds, shutters, footsteps, and to do everything belonging to the inside (and outside leather work) of the bodies of carriages.

The lining of carriages is generally made of woollen cloth, sometimes of morocco leather, and sometimes partly of both, trimmed with lace manufactured for the express purpose, made a fancy pattern, or with family arms or crests as may be wished. There are also interlinings, made generally of cotton cloth used for the purpose of preserving the principal lining. I have now nearly completed my review of coach-making.

There are two things which naturally suggest themselves to the minds of those interested in the improvement of carriages; the comfort of the people who ride in them, and the ease with which they can be drawn. Perhaps the introduction of springs was one of the greatest improvements ever made in carriages. It is mentioned in the *Memoirs of the French Academy*, that the idea of applying springs to carriages was suggested by M. Thomas, in 1703, and that he actually gave a drawing of a carriage constructed upon that principle. It appears, however, from the same work, that he considered it an improvement rather of a theoretical nature, than one capable of being reduced to practice. The result, however, has proved the contrary; and whether M. Thomas is really entitled to the invention or not, it is the greatest improvement that has ever been made in the construction of carriages.

The next improvement I must mention, is the present method of constructing carriages to open at the top, giving at once all the advantages of a close and open carriage. Although it is not long since this improvement was introduced, yet it has so gradually come to its present state of perfection, that I cannot say when the first carriage of the kind was constructed, which could be said completely to answer the intended purpose.

The old-fashioned, long-perch carriages having been found to occupy a large space in turning, the crane-neck was introduced for the purpose of remedying this inconvenience. The crane-neck, however, soon gave way to the short perch, which is found equally to answer the purpose of turning in a short space, although it requires the body to be hung higher;

but perches are rarely used now except in coaches and mail phaetons.

The axle-trees known by the name of Collinge's patent, ought not to be overlooked as a material improvement; they undoubtedly facilitate the draught, and save great trouble in oiling; they are ingenious in their construction, and afford considerable security.

A writer, to whom I have referred for many of my particulars respecting coach-building, gives the following interesting account of an iron under-carriage: "One of the latest improvements is that of making carriages totally of iron, which, among other advantages, possesses that of having more strength than those of the ordinary construction of the same weight. The first of this kind was applied to a heavy stage-coach, licensed to carry sixteen passengers, besides baggage, and has hitherto required no repair, although the coach has already run upwards of 90,000 miles with the same velocity as the mail-coach. Metal wheels have also been introduced, and axles of a new construction."

But this was written some years ago; and I am inclined to think that, in the coach mentioned by this writer, there was little more iron used in the under-carriage than is now the case, although at the time the fact of using iron so extensively may have suggested the name of an iron carriage.

It would be a hopeless task to attempt, within the limits of a work of this kind, to go exhaustively into matters relating to coach-building; consequently I intend the rest of this chapter to be presented to my readers in the form of unconnected gossip on matters relating to the building of carriages. Having said this, I may be excused if my treatment of the subject appears somewhat erratic.

It must be remembered that, in making the bodies of carriages, no very great skill is required, unless they be of a curved form, which necessitates the bending of panels and more delicate workmanship, in which case you enter upon the higher branches of the coach-building trade. But where the bodies are square, and there is no curved or bent surface, the workmanship is in no way superior to first-rate joiner's work ; but it is these curved surfaces that give to a carriage the artistic and graceful shape in which the best of our coach-builders so excel.

In order to avoid the carriage-tax on four-wheel carriages, some few years ago, in place of the old four-wheel pony-chaise and other vehicles of a similar nature, a number of small carts were introduced, having varnished bodies ; these ranged in size from the small village cart to be drawn by a pony to the dog-cart suitable for a full-sized horse, and the introduction of these carriages created quite a revolution in the lower branches of coach-building. Yearly the demand for this class of vehicle has increased, and in the streets of every country town throughout England, and along the many country roads diverging from them, may be seen numbers of vehicles of this description ; they are known by all manner of names, such as the rustic cart, the village cart, the Battlesden car, the Norwich pony-cart, and numberless other names which signify a desire on the part of the builders to provide a carriage of the simplest and most humble description, yet having style and smartness. Many of them are mere boxes on wheels, and, being so, naturally do not require any high-class workmanship to be expended upon them. The dash is not covered with patent-leather, but is of

wood painted black, as also are the wings ; the springs are more frequently grasshopper than elliptic springs, and every part is of the simplest construction. Speaking of springs, a letter appeared in the *Field* newspaper on April 7th, 1883, in which C springs were strongly advocated for carriages without perches as being the most comfortable in every possible way. There are certain trade difficulties respecting it owing to some unexpired patent ; but the gentleman who writes this letter says that having used them for some years he is convinced that no spring more nearly approaches absolute perfection, both for ease of riding, safety, and lightness for the horses. In mentioning these springs he does not mean the old C spring as formerly used, but a modification of the old spring. Another gentleman, writing to the same paper, confirms the first writer's opinion by saying that " no carriage can be easier than one hung on C and under springs, as the body of the vehicle can swing gently, longitudinally and laterally [he should say latitudinally], so that every shock is broken." This writer goes on to say that to neutralise vertical shocks he employs a layer of corrugated indiarubber which he places under the cushions. " I am using it daily," he remarks, " in two carriages of mine, and find them much easier than without the indiarubber under the cushions." This would appear a very sensible plan and very well calculated to diminish concussion, were it not that the Editor of the *Field*, in a footnote, remarks, " we have ourselves tried the corrugated indiarubber springs, but could discover no advantage in them."

Mr. Hooper, of Victoria Street, one of the most eminent of all coach-builders, in his report on the carriages exhibited at the Paris Universal Exhibition

where he acted as vice-president and reporter of the International Carriage Jury, in speaking of coaches exhibited at the Exhibition, mentioned drags as a thoroughly national carriage, which should be copied, not only by France and America, but by other European nations. He qualifies this remark by saying that the French and American coach-builders have shown great aptitude in catching the style and copying the construction which has engaged the attention, ingenuity, and varied experience of English coach-builders, as well as amateur and professional drivers for many years past, notwithstanding that they have now arrived at a high state of perfection.

There are many ingenious contrivances to render them more accessible for ladies. These vehicles, he goes on to say, should be more for use than ornament ; they occasionally get very rough treatment. Moreover, their exposure to the weather and general use at race meetings, cricket matches, and picnics, is a severe trial to carriages of such elaborate and costly finish. A drag should not be pretty, but properly built for its destined use ; if a drag has a habit of rolling when the horses canter or gallop, the discomfort and danger to those on it is not compensated for by the high polish and brilliancy that is so attractive to the uninitiated. Many of those that carry passengers in and out of London have been very successfully treated in this respect, or they would not have been so well supported. Mr. Hooper attributes much of the skilful work observable amongst the French exhibits in the carriage department, to the sobriety of the French nation. Many of the British carriage workmen, he says, are sober, industrious, and skilful, but they lack the special training of the French. A run of prosperous years,

when labour was in great demand, has led to drinking habits with many, causing them to become careless in their work, irregular as to their hours, and the influence of these habits has been in every way pernicious. Great and steady progress has been made in England towards greater sobriety ; but a few years of brisk trade have thrown back the progress of improvement. Until a great change takes place, as regards the consumption of strong drinks, British carriage-building, like other trades, can make comparatively little progress.

These observations, coming from an eminent coach-builder like Mr. Hooper, only confirm the opinions of all employers of labour with respect to the question of drink. English workmen become intoxicated with strong liquors, whereas Frenchmen rarely, if ever, are intoxicated, except with excitement. In times of popular excitement, no nation loses its head quicker ; but this is not to be attributed to the intemperate use of strong drinks, but rather to a wrongly directed superabundant vitality, engendered by false political teachings, to which one need only apply a spark to kindle an unquenchable flame.

A remarkable feature in the French carriages, Mr. Hooper says, is their very high finish. They are all varnished with English or American varnish ; many of the most highly-finished are, in addition, hand-polished all over panels, wheels, etc. Masters and men must have worked together harmoniously to obtain such results ; they both receive a more suitable, scientific, and artistic training than in England ; there is evidence of care, patience, intelligence, taste, and a loving pride in their work. The fittings of the drags especially are finished with great care : walnut-wood, veneered ice-wells, polished

iron folding-steps, etc. The bright iron and steel work is in many cases coated with nickel, thus saving much time and labour in keeping it clean. This process is in much more general use in France and America than in England. It is said that a patent stands in the way of its more general use in our own country. But it must be remembered that carriages are for use on dusty and muddy roads, and to take people from place to place; dust and mud are fatal to such fine work. If it is really to be preserved, people would be obliged to buy one carriage to use, and another to look at.

The ingenuity and skill of the French carriage-builders is shown in numberless contrivances; some for converting one carriage into two or more, some simple, some complicated, and some so elaborate that it would require a skilled engineer or mechanic to accompany them when used, to adjust any matter that might happen to go wrong when in use, or on their return from a drive.

The hours of labour in France are longer than in England, and Saturday half-holidays are unknown among French carriage workmen. They receive their wages in some cases once in four weeks, in others once in two weeks; whereas, the English carriage workmen are all paid weekly.

England, France, and America have each periodicals devoted to carriage-building. One English journal publishes essays which were written in competition for the prizes offered by the Coach-makers' Company, on the subject of coach body-making, carriage-making, and spring and axle-making. When the series is published, complete in one volume, it is hoped that it will form a good text-book.

Mr. Hooper, continuing his report, says: "It is true that technical classes are carried on in England, but the energy and forethought are not so apparent on the English side of the Channel as on the French in this matter; routine and experience in England taking the place of scientific training. While the Company of Coach-makers of London has been pondering how to do it, the employers, foremen, and workmen in France, wiser in their generation, have been working out a very clever and complete course of teaching and training for the rising generation of coach-makers; if other trades in France have made as much progress, the French may well be proud of the intelligence, industry, energy, and patriotism of her people. It is to a certain extent a proof that she has recovered from the effects of the Franco-Prussian war.

"In the French department are also shown samples of wheels, springs, axles, ironmongery, wood-carving, metal-chasing, lamps, internal fittings, cloth, lace, silk, etc., mostly in ample variety, and of good quality.

"A product in which the French are in arrear is varnish. For many years the English had almost a monopoly of the varnish trade of the world.

"In comparing the brilliancy of the varnish of the English and French carriages, various points have to be taken into consideration. In London the soil is mostly clay, the climate moist, and the coal-smoke ever present in the air; the combined effect is to render all surfaces dull and dirty. Whereas the soil of Paris being rock and porous earth, the climate dry, and the smoke mostly that from wood or charcoal fires, the air is purer and cleaner, and the carriage panels retain their brilliancy longer than in London.

"In leather the English are still pre-eminent,

especially for such as is enamelled or japanned ; for pliancy, toughness, and colour, it is unequalled. Large quantities of it are used by the best coach-makers in France and America.

“ English carriage-cloth is still, as it has been for many years, made of excellent quality ; but the French are introducing novelties in cloth, to adapt them to the use of the numerous open carriages now made for country work.

“ The mahogany used for the panels of the English carriages enables the makers to produce a more accurate and durable surface to their carriages than those of other countries, and for bodies and under-carriages (and especially poles), no wood seems to equal the hedgerow English ash for toughness and durability.

“ England still retains her reputation for the best axles. Not only was the system of Collinge an English one, but her iron, fuel, and processes of fitting and hardening the arms and boxes are superior to those of other countries.

“ The English have made great progress of late in the manufacture of carriage-lamps, both as regards illuminating power, soundness, and style of shape. Some (mineral-oil lamps) are now made for the use of the London street cabs that produce a brilliant light at a very trifling cost per night.

“ The most costly carriages shown are those from America ; so costly, in fact, that the best London carriages can be delivered in New York at lower prices than those charged in America, notwithstanding a duty of thirty-three per cent., the cost of elaborate packing, long sea voyage, and insurance against injury or total loss in transit.

“ Some of the American carriages exhibited have the axle-boxes bedded in the wheel-stocks, with front and hind collar or cushion of indiarubber secured by a slightly tapered and screwed iron collar ; the object is to cut off the vibrations of the wheel from the body, so as to reduce the concussion while the carriage is in motion. The American wheels are not shown with the carriages, but with the American machinery, in a separate annex ; this is a manufacture in which they specially excel ; they seem to have brought all their energy, skill, and ingenuity to its development, whether as regards the excellence of the machinery employed, or in the finished wheels. It was first necessary to make a great effort to supply the demand of the public for light wheels ; these were of little use in such a country, if they were not durable. To secure this end, not only was it necessary to use the choicest timber, but the most careful and accurate workmanship.

“ The American hickory was found to be the wood best suited for such wheels. Not only had machines to be invented to facilitate the manufacture, but such machines had to be worked by carefully-trained men. The general education received by the American people enabled them to secure intelligent workers, who saw that machinery was a friend to be encouraged, not a foe to be kept at a distance ; the consequence is that, while English workmen have been casting difficulties in the way of improving the wheel manufacture, the Americans are supplying the world with such wheels as for accuracy of workmanship are unsurpassed. For not only have they made their national light and high wheels for their fast-trotting carriages, but they have produced wheels of the pattern and size used in Europe, and adapted for European carriages. Large quantities are

now sent to England and many parts of Continental Europe. A few of such wheels are sent from Canada ; but it is evident that the United States of America have developed the wheel manufacture in advance of other nations. Not only is it a distinct trade from the coach-maker in America, but large wheel factories with the finest machinery, are worked by thousands of intelligent workmen and prosperous employers.

“ In this exhibition Russia, Italy, Austria, Belgium, Holland, Hungary, Norway, Canada, Switzerland, etc., show carriages of various forms and make ; many of the English and French type ; some national, such as the travelling-phaeton from Pesth, the cariole of Norway, and the light carriages of Canada. Some copies, as the drag from Pesth, are capable of much improvement, but show a growing taste for four-in-hand driving in the south-east of Europe among the magnates of Hungary.

“ Speaking of Parisian omnibuses, the Paris General Omnibus Company, and the Paris General Carriage Company, each have their own manufactories, the latter at 134, Rue d'Aubervilliers. In the omnibus factory nearly all the carriages are alike, and the various parts interchangeable. This system has its advantages and its drawbacks ; in the first instance it was necessary to consider the conditions that had to be fulfilled as regards the number of passengers to be carried, the weight of the carriages, the best proportions, the size, shape, and strength of the various accessories. Of course carriage-building must have reached a certain degree of perfection before such a system as that of interchangeable parts can be worked with any chance of success ; but a well-conceived plan,

well developed under careful management and a good organisation, had much to recommend it.

“ By uniformity of pattern, machines are worked with economy and with satisfactory results. The great advantage in such a business and establishment, when the wear and tear of the traffic is continuous and excessive, is the immense facility of repairs.

“ A broken spring is replaced at once by a similar one taken from the stock without delay, the same with axles. Worn wheels can be replaced in an hour by others of uniform size, kept in readiness.

“ At the Paris General Carriage Company the same plan of uniformity is observed, but cannot be carried out to a similar extent as there is a variety in the patterns of the carriages ; these consist of a single brougham, victoria, four-wheel hansom, double victoria, four-wheel cab (London pattern), small landau, and a small omnibus.

“ The first three are so made that the wheels, axles, springs, fore-carriages, driving seats, and dashers, are interchangeable. This plan not only facilitates repairs and shortens the time the carriage is kept from work, but is also an advantage to the public as well as to the company. It is a system which London coach-builders would do well to adopt.

“ Another establishment worthy of a visit is the carriage-spring and axle factory of M. Lemoine, at Ivry, near Paris. With ample steam-power and well-designed machinery, he employs about 350 men. In its present complete state it is only four years old ; all the processes to which machinery can be applied are here carried out with an excellent organisation ; the work, between the various processes, being examined

and tested by persons independent of the workmen, with a view to accuracy and satisfactory results.

“About 120 of the men are employed in the manufacture of carriage-springs. Great care is taken to ensure soundness, good fit to the plates, and well-fitted and jointed ends ; they are tested as to soundness and elasticity twice at the works, again at the *depôt* in Paris, so that the French carriage-builders are in this direction well supported by those who use springs which they can rely upon. Not very long ago, a French coach-maker was of necessity obliged to employ spring-makers on his own premises if he wished to use reliable springs.

“Taking the French carriages as exhibited, they are heavier than those made in England ; there may be good reason for this, as, notwithstanding the excellent paving in that part of Paris seen by English visitors, other parts away from the fashionable quarters are anything but good ; even in the street where the works of the Paris General Carriage Company are situated, the state of the road is so bad that it would be difficult to match it in any part of London. The company's carriage-springs are tolerably well tested in the very street where the carriages first emerge from the works, and before they begin to be used. An omnibus of the London General Omnibus Company would well bear comparison with the French one, as regards lightness and carrying power ; but a genuine London four-wheel cab would make the French public believe that London was just emerging from barbarism, unless a London hansom accompanied it to show that things are not quite so bad as they seem.”

Here terminates Mr. Hooper's report on the

carriages exhibited at the Paris International Exhibition. It will be observed that he does not confine himself to mere notices of the carriages exhibited in the Exhibition, but reviews the condition of the coach-building trades of England, America, and on the continent of Europe. As a practical carriage manufacturer himself, his observations are deserving of attention. Other coach-builders nearly, if not equally, as experienced as Mr. Hooper, do not give us the benefit of their experience, possibly not caring to commit their thoughts to paper.

The jurors at the Dublin International Exhibition of 1865, were Mr. Arthur Holmes of Derby, and Mr. George Hooper of London, carriage-builders; also Mr. Maxwell Hatton of Dublin, a carriage-builder who acted as chairman, and Mr. Peters, the well-known carriage-builder of London. In the report it is observable that the word coach-builder is not made use of; and it is certainly incorrect to speak of coach-builders, since "coach" at the present day only signifies a vehicle drawn by four horses, whereas a carriage-builder constructs carriages of all kinds, although some are specially distinguished for a particular class of carriage.

At this exhibition the jurors in their report, which was drawn up by Mr. Hooper, speak of the changes that have taken place in horses and carriages during the past few years. There has been a demand for lighter carriages. This is attributable to the use of a smaller, lighter, and more active breed of horses; the demand for such horses is supposed to be owing to the fact of persons liking small horses, from fifteen hands to fifteen-two, that they can both ride and drive; besides which, small horses are much faster and more

active in harness than larger ones ; horses over sixteen hands are generally very slow in harness, although there are exceptions.

In speaking about brakes these jurors commend highly both the screw and lever brake ; the precipitous slopes of the Alps are daily descended at a trot by the diligences and vetturini, all owing to the safety and convenience afforded by the brake.

At the previous Dublin Exhibition of 1853, one of Mr. Bianconi's four-wheel outside cars was shown. It was made to take a large number of passengers, and was of a very light weight, although unsuitable as regards shelter in bad weather, and it is nearly always raining in Ireland. These cars, nevertheless, possess many advantages ; the weights are kept low, thereby affording safety in case of a collision or break-down ; and the seats being low, it was easy for passengers to alight or mount the vehicle quickly.

In this Exhibition it was reported that the use of steel instead of iron gradually increases. Attempts were being made to use it for axles ; since then it has been used for axles, Bessemer steel having been procured for the purpose, although some difficulty appears to have arisen when welding, to prevent the parts flying asunder. Mr. Hooper advocates bolts, nuts, and screws of toughened steel, on account of their not requiring large holes to be bored in the wood-work to take them, by which the wood is not weakened.

Mr. Hooper speaks highly of French roads ; but in a previous report, I remember he says that the Paris omnibus need be strong and heavy, because the roads away from the English quarter of Paris are so intolerably bad.

In speaking of the carriage trade he says, that whereas, once upon a time, owners of carriages had them built to order, now they select an unfinished carriage of the form they require and have it finished to suit their taste, and painted a colour they select, or one they are bound to use, as it represents their family colour. In speaking of the difference between light and heavy carriages, the jurors of this Exhibition condemn the practice of using a large horse for a small light carriage as being unsafe. I cannot agree with them in this respect, although too large a horse in too small a carriage naturally looks out of place. Heavy carriages are said to be more comfortable to ride in ; this is Mr. Hooper's opinion as representing the jurors. He says they are safer for horses and drivers ; but I fail to understand how this can be if the light ones are strong and well-made. He qualifies this remark by saying that heavy carriages require repairs less often, whereas light carriages are constantly requiring repair ; lighter carriages follow the horses more easily, and of course are less fatiguing to the horses, but light carriages should be well and strongly made to compensate for the want of weight and bulk. These jurors condemn the practice of driving without breechings, but it must be remembered that coach or carriage-builders are not coachmen, or very rarely so ; with a powerful brake, there is no objection that can reasonably be made with regard to dispensing with breechings. Breechings necessitate the use of cruppers, and cruppers are certainly uncomfortable and inconvenient to an animal engaged in draught ; when used at all, they should be strapped lightly and never allowed to chafe the horse. Cruppers are

merely used to keep the pad from slipping forward, and a horse with good withers can need no crupper.

Mr. Hooper, in writing of the exhibits in the carriage department of the Colonial and Indian Exhibition at South Kensington, mentions the Cape carts as having very long poles extending beneath the carts almost to the back, which gave strength and solidity. I did not notice this myself; but with curricles, such as they are, the pole should pass to the back of the cart, as, by doing so, it is rendered far more steady and does not rock or sway about to such an extent as it would otherwise do.

The young princes, Albert Victor and George of Wales, sent home to the Princess of Wales a jamritzka from Japan, and a Cape cart from the Cape of Good Hope. In this Exhibition were exhibited some South African waggons; probably the strongest conveyance off a railroad ever made, except it be a traction engine. The wheels are massive and stupendous, as they need to be, seeing that they frequently have to cross the roughest and most rocky country without a vestige of road, frequently not even a cattle-track. They are drawn generally by about sixteen oxen, with three or four drivers urging them forward with enormously long and heavy stock-whips; but when we have spoken of such conveyances as these, we have gone to the very extreme limit of carriage or coach-building. These waggons are all covered, and form both a means of transit and a habitation. Professor Macoun, a Canadian, says the Cape waggons are unnecessarily heavy, that a light Canadian waggon frequently draws a weight which would astonish the Cape drivers, and advocates attaching one waggon behind the other and

moving one at a time whenever very severe obstructions were encountered.

This gentleman goes on to speak of the prejudice in England against labour-saving machines, owing to the impression in the minds of workmen that they render manual labour unprofitable and undesirable. But this is a mistake, as has been proved repeatedly ; improved machines rather than lessening create a new demand for labour, although it may be, I admit, labour of a different kind to what was required before their adoption. In consequence of this prejudice a system of labour prevails in England, in various departments of manufacture, that was in vogue fifty years ago ; whereas, America and Continental nations have in many instances adopted the improved system.

It is probable that between 1000 and 2000 men are employed in America in preparing wheel-timber and materials, and in making wheels for the British market. This is a fact to be greatly deplored.

I must again refer to Mr. Hooper, to whom I am indebted for copies of papers he has read and reports he has made at the various Exhibitions on the subject of carriage construction. In a paper read by him at the City and Guilds of London Institute at South Kensington, he says, in speaking of wheels : " Many alterations are shown in the form, materials, and system of construction. Many wheels are made with malleable iron bands to the stocks ; and being provided with morticed spaces, they carry the spokes more firmly than when framed into wooden stocks, and are rendered more durable, although at an increased cost.

" A plan has been introduced of bedding the axle-boxes in the stocks with bands of indiarubber, one at

each end, to reduce the vibration. The lubricating oil, however, sometimes acts on them, and dissolves portions, rendering them insecure and liable to accidents.

"Indiarubber tires have been introduced with gradually increasing success, owing mainly to the use of the materials in a better form, and an improved method of cementing. The chief drawback is their limited durability, especially when used on roads of fresh-laid small stones on the MacAdam system. To remedy this, a plan is shown of providing a wheel with a hollow external tire, bedded on a cushion of india-rubber, that encircles the whole wheel, and is concealed by the external hollow tire." This plan I myself proposed, not knowing that such a plan had ever been adopted. "As regards axles, a very considerable step has been made in improving them. By methods suggested by the Institute of British Carriage Manufacturers, which took up the subject, several improvements of great value have been introduced. Carriage manufacturers had long desired improvements in quality, accuracy, and facility of repair.

"The liability to cause a rattling noise, chiefly owing to the demand for light carriages, reducing the diameter and wearing surfaces of the arms and boxes, had to be overcome.

"The multiplicity of sizes and parts varying greatly, and complicated by each maker producing sizes strictly confined to his own works, rendered repairs costly and tedious.

"The first step was to devise means to produce order out of chaos ; and after having ascertained what really was necessary, communications were opened with Sir Joseph Whitworth. It was soon found that

his investigations and experience would enable the Institute to carry into practice the ideas that were uppermost in the minds of the council.

"The cordial and ready permission he granted to members of the council, and practical axle manufacturers, to visit his works and inspect his methods of manufacture, enabled them to take steps that would have been most difficult, and almost impossible under less favourable conditions. A Committee on Standard Sizes was nominated ; to this were added some of the best known and most experienced axle manufacturers. Further investigations being found necessary, a sub-committee of experienced axle-makers was nominated to deal with the numerous special and practical details. They reported to the General Committee on Standard Sizes, who in turn recommended the adoption of standard sizes to the general meeting of members. After still further discussion the report was finally adopted, recommending the gradations of sizes to be in fractions of eighths of an inch, as most familiar to all parties, and meeting the greatest number of wants.

"Standard sizes have been adopted with regard to shaft proportions, by which it is hoped many accidents to life and limb will be avoided, and also to the sockets for carrying lamps, enabling them to interchange without trouble or misfit when properly made to the official standards.

"With regard to springs, there have been many changes in carriage-springs made of late years ; among the chief is the very ingenious machinery for forging, drawing, and grinding the plates, rolling the eyes, and forging the cupheads, greatly reducing the time and labour necessary to make thoroughly reliable springs ; and were more attention given to the accurate turning

of the bolts and fitting of the cupheads and eyes, they would leave little to desire."

These remarks with regard to Sir Joseph Whitworth's fractional computations open an entirely new feature in the construction of carriages. Were a system properly established by which interchangeable parts could be made use of, the repair of carriages would be a matter requiring but little time or attention on the part of the coach-builder; and were there, in addition to this, greater attention paid to the measurements, particularly to the distances that one part was from another, we should not have carriages as they are frequently made nowadays, sprawling about all over the place, with no regard either to uniformity or to the increased draught consequent on want of attention to these details.

Machinery, were it to be constructed without serious consideration as to measurement, would occupy far greater space than could possibly be provided for it, particularly on board ships; but happily it is so arranged, and space is so marvellously economised, that there does not exist within the limits of good machinery an atom of space that is not made use of for some purpose. The moving parts pass one another so closely, that the distance between them is computed by the millionth part of an inch; and it is the late Sir Joseph Whitworth who was particularly active in bringing about this condition of things; and I can see no reason why in the construction of carriages some of the nicety as regards measurement, that is such a striking feature in the manufacture of machinery, should not also be applied to carriages intended for the common roads. Were this so, the appearance of carriages would be im-

proved, their draught would be lessened, they could be made both lighter and stronger, the parts would not get so quickly loose as they do now, causing the carriage to jolt and shake ; consequently there would not be the noise there is now when a carriage was in motion.

There are used in the construction of machinery a variety of gauges, some of which might be applicable to carriage construction. There are both cylindrical and flat gauges made for this purpose ; the cylindrical gauges would be too delicate if made smaller than one-tenth of an inch diameter, so that for sizes below this, down to one-fiftieth, flat gauges are used—a gauge of this form was made by Whitworth. A mechanical means by which the division of very minute quantities can be made visible, was suggested by Mr. Ramsbottom. This is brought about by a corresponding but very noticeable difference taking place in another part of the machine.

Messrs. Elliot Brothers brought out a pocket-gauge for measuring the thousandth part of an inch. Mr. Holtzapffel also brought out a sliding-gauge for measuring the thousandth part of an inch. Another machine by Sir Joseph Whitworth measures the ten-thousandth ; this has been used for ensuring accuracy in various patterns before issuing them from the pattern-makers' shop. Sir Joseph Whitworth also invented a machine for computing the millionth part of an inch ; this was exhibited in the Exhibition of 1851. This is, perhaps, greater accuracy than is required for mere carriage-building, but many of the gauges mentioned would be of great assistance in the making of axle-arms, boxes of wheels, and the screw-nuts by which they are secured to the axle ; besides which, too

great accuracy cannot be manifested in the making and fixing of the various portions of a carriage, both iron and wood, especially in the matter of iron bolts, screws, nuts, etc. ; the better they fit, the quieter will be the carriage when in motion, and the easier it will be to ride in.

In my opinion, there is an immense deal of unnecessary bulk and weight in a modern carriage, which might be dispensed with ; there should not be a single unnecessary part. The same thing should be urged in the making of harness ; why, for the sake of appearance, and in order to be in fashion, should horses be made to carry harness which is unnecessary, and which is only apt to chafe them, and add to their fatigue, when safety and comfort both to horse and driver can be secured with less trouble and less cost ? Mr. Hooper continuing says :

“ The springs, both elliptic, under, and C, are made of better shape than formerly. In many cases, the end bolts are carefully and accurately turned and fitted with casings of brass, and in others surrounded with indiarubber, with a view to reduce noise and vibration ; other elliptic springs are coupled together at the ends with balls of indiarubber, secured with a single bolt. The system of suspending light carriages on C springs without a perch, was introduced about the year 1844, and at that time many were so made. Recently, a combined C and elliptic spring has been brought into use. There is yet another innovation in springs, by which they are attached to the axles with a collar of indiarubber between them, instead of the ordinary wooden block.

“ As regards locks, for many years British carriage-builders have been desirous of procuring reliable spring-locks for doors of carriages. Up to a recent time they have been dependent to a certain extent

on France and America ; but locks of finer quality and design are now made in England that surpass those procured from other countries, and the tendency is still further to improve and simplify them.

“ Carriage-lamps have been much improved in pattern and style ; the methods of fastening them to carriages have also been improved. When the standard size sockets become more general, many advantages will accrue in facilities for interchanging lamps.

“ Brakes for retarding the speed of carriages when descending hills, and keeping back the weight from the horses, have had much attention bestowed upon them.

“ The preparation of morocco leather has undergone improvement, the surface has been waterproofed, preventing saturation by rain and preserving it for a longer time.

“ The existing cry for cheapness, combined with the exceptional annual taxation, naturally influences the quality of carriages now constructed. The numerous light carriages that are now made can be taken into hilly and mountainous districts, where heavier ones could hardly travel.

“ Another demand of the 'present day is for high wheels. Scientifically, and for easy running and speed, these are very desirable, and in new countries with bad roads or no roads, they are indispensable ; but under some conditions they carry penalties side by side with advantages. With rapid driving they throw far more mud than those of more moderate height.”

Mr. Hooper, before closing his remarks on the subject of improvements in the carriage-building industry, says that “ it is specially taxed, and consequently labours under exceptional disadvantages. Railway carriages have never been taxed, nor have road carriages been

taxed in Ireland, but railway carriages compete very severely with road carriages.* In many parts of the country they have almost driven them off the roads, and the very few exceptions go to prove the rule. Every new railway or tramway opened tends further to crush the carriage-building industry. It is said sometimes that the rich pay the carriage taxes. Investigations prove that, although the taxes are directly paid by the owner, they are ultimately paid out of the wages of the workmen and the profits of the employers ; they enhance the cost of manufacture, rendering competition with foreign countries difficult and almost hopeless, and they intensify on the carriage-building industry a trade depression that seems general. The exceptional and oppressive character of these taxes on industry demands the careful consideration of statesmen and financiers." But the question of the carriage tax I have dealt with elsewhere, and therefore I will now quit the subject.

In speaking of springs I forgot to mention that tilbury springs have been applied to a brougham in order to ease and stop vibration. I believe that Lord Arthur Somerset is the first person who had this done to his own brougham, which Mr. G. Newson, the well-known coach-builder of Bond Street, mentioned in a speech he made before the members of the Institute of Carriage Manufacturers, which statement was received with general approval.

In the Carriage Department of the London International Exhibition of 1873, there were some interesting exhibits of conveyances formerly in use ; amongst these were sedan-chairs used by former Duchesses of Northumberland, and various litters, etc., from India, Japan, etc., as also an Australian barouche, lent by His

* In England, and yet they are subject to no tax.

Royal Highness the Duke of Edinburgh, and a town chariot, built about forty years ago for the late Earl of Onslow. As a means of comparing the British export of carriages with that of foreign countries, Her Majesty's Commissioners, at the request of the Carriage Committee, have procured from the Board of Trade statistics of the export and import of carriages, which show that the export trade of France and Austria now greatly exceeds that of Great Britain. The Postmaster-General showed a model of a mail-coach, such as carried the letters of a former generation on all the great roads throughout the country.

The literature of carriage-building does not receive so much attention in England as in several other countries. In France a magazine is published every two months; and in the United States, there are two periodicals dealing specially with carriage-building. These are well supported, and have a large circulation; in them are discussed an infinity of matters connected with the manufacture of carriages, and illustrations of new designs and methods of construction appear constantly.*

The conditions under which the Americans carry on the carriage manufacture differ from those of Great Britain. Up to the time of their war, carriages were untaxed, and their use became much more general than in England; their trade is now protected by a duty of thirty per cent. on foreign carriages imported.

Up to a recent time foreign carriages were prohibited entry into France, except as the property of persons using them. As regards taxation it is not levied equally in Great Britain, for, while carriages

* The best English publication on the subject is the *Coach-Builders' Art Journal*, published by Messrs. Cooper, of Long Acre.

are untaxed in Ireland, they must pay a yearly duty in England, Scotland, and Wales.

A peculiarity of most foreign carriages is the difference of the track of the front and hind wheels; this is caused by the continual striving of foreign builders to shorten to the utmost the distance between the front and hind wheels; they effect their object partly by complicated arrangements of the fore carriage, aided by a shortening of the front axle several inches. In England we submit to a longer space between the front and hind wheels, with these advantages: the hind wheels following in the two tracks marked or cut by the front wheels, have that portion of the road rolled for them, whereas in the foreign plan, each of the front and hind wheels has to roll a track of its own, thereby increasing the draught to the horses.

Besides this, the driver of an English carriage can rely on his hind wheels passing where his front wheels have cleared; not so the driver of a foreign carriage with short front axles, for his front wheels may have passed without collision or accident, but he can hardly ever be sure of his hind wheels being safe, unless he has a tolerably clear space on each side.

It may be interesting to some persons to know that the waggonette, which has enjoyed great popularity for many years, was introduced by the late Prince Consort, in the year 1845.

Sir Joseph Whitworth steel is sometimes used in the construction of carriages instead of iron. For many years the late firm of Raworth produced large quantities of excellent carriage axles forged by machinery; experience has proved how sound and good the forgings by such means can be made.

The introduction of steel goods coated with nickel has much to recommend it; polished pole-hooks, chains, driving-bar ends, bits, stirrups, spurs, when treated by this process can be kept clean and in good condition with one-tenth of the labour that is necessary to keep steel bright, considering that a very short exposure to water or to damp air produces oxidation.

The painting of heraldic devices on carriage panels has fallen much into disuse of late years; formerly great importance was attached to this art.

The glass of carriages should never be too thin, as thin glass has a tendency to vibrate and rattle.

Very little has been said about lamps; but this is a very important matter as regards the fitting up and finishing of a carriage. In London and other large towns where the streets are well lighted, only a very faint light is required, just sufficient to prevent vehicles colliding with one another, since in a town one cannot go far without meeting with a street lamp-post surmounted by a respectable gas-lamp. But in the country it is quite a different matter, and those who have never driven through country lanes on a pitch-dark night have little conception of the misery of such an experience; besides which it is very dangerous, as the carriage and its occupants may be hurled down a precipice or precipitated into a deep ditch, whilst the overturned carriage lies on the top of you, or the horses kick your brains out in their efforts to become emancipated from their harness. Or you may be driven into by a vehicle approaching from an opposite direction; but this last-mentioned fatality only takes place when you and the approaching vehicle are without lamps, and neither

one can see the other. But these tragic events are not likely to occur with the exercise of proper precautions.

Nevertheless, to drive without lamps except at a walking pace, even on roads that have been familiar to you in the daylight for years past, is a matter of great difficulty; and it is almost as bad when the candle-lamps you are using will not burn up properly, they merely render the darkness visible. Possibly they light up very faintly the fence at the side of the road, whilst leaving the road itself in utter obscurity; in fact, oftentimes when using lamps, and the road is as I have described it, if you turn round in your seat and look at the road you have left behind you, you will observe that it is comparatively light compared with the road in advance of you; and this is only in consequence of the insufficiency of light produced by the lamps, and in consequence of their not being directed toward that part of the road in advance of you which it is most necessary should be illuminated. Apart from the question of safety, it must be remembered, that when you cannot see where you are driving to, you can only drive very slowly, consequently you double the length of the time required for the accomplishment of your journey. I experienced an instance of this the other night; as a rule I have my lamps in perfect order, but not having been out driving after sunset this year, I had given no attention to the matter. I drove over to Southampton from this house, a distance of ten miles, intending to return before dark, but this I failed to do; consequently the drive that would by daylight have taken one hour took nearly two, although I was driving in a light curricule with two fast horses. I do not think that when driving



A PAIR OF SIDE LIGHTS AND A POWERFUL DASH LAMP BY SALISBURY, OF LONG ACRE, SUITABLE FOR A FOUR-HORSE DRAG.

[To face page 425.]

of a dark night on country roads the light can be too powerful ; when it is not a dark night, and the road does not pass much under trees, a carriage is better without lamps. The best lamps in my opinion are oil.

Messrs. Salisbury, of Long Acre, stand pre-eminent as carriage-lamp manufacturers ; but I will speak of lamps and their application to carriages hereafter. For the present it is only necessary to mention the lamps most in use. The lamp most often used is a candle-lamp, with a spring below the candle to raise it in the socket, on the old-fashioned principle. These are the lamps commonly used, and with proper care they ought not to get out of order. When the case of the lamp is muddy, it ought to be washed with a sponge, taking care that no wet gets inside ; which, if covered with candle-grease, ought to be held near the fire for the grease to melt, and then rubbed with a dry cloth, and afterwards cleaned with plate-powder ; if the springs upon being taken out are dirty or choked up with grease, they should be placed near a fire, when the grease will melt and run away. If the candle fit the socket, the candle will always rise in proportion as it is burnt away, and will never fail to burn properly. During a long driving tour I once took without a groom, I attended to the lamps myself, and I had no reason to regret doing so, as they burnt well during many a long journey in the dark, and never once went out.

There are other lamps made which burn both colza and mineral oil. Of course there is some danger about using mineral oil, but it gives a very brilliant light. Hansom cabs frequently are fitted with lamps that make use of this oil. I recollect reading in a newspaper that in Vienna there was a cabman who used electric light in his cabs, which he generated by the

action of the wheels when in motion. Four-horse coaches make use of colza oil lamps, a number of which are supplied by Mr. Salisbury, of Long Acre. These are upon the very simplest principle. The wick is flat, and passes up through the lid which covers the oil, and is continued through two narrow channels or tubes, on the sides of which are two small openings into which a pin may be inserted, by which means the wick can be raised or lowered. Other colza lamps on a different principle have been introduced, some in which the wick turns up and down by means of a handle ; but the one I have mentioned is the simplest and least likely to get out of order. Mr. Salisbury's drag-lamps are very large ; I always speak of them as lighthouse lamps, as they remind me of the huge lamps and reflectors in a lighthouse. A number of dash lamps of great power are sold, and these are extremely useful if kept low and away from the line of vision, particularly when driving a pair of horses. When driving only one horse I do not approve of their being used ; but in driving a pair the light shoots right ahead between the horses, lighting up the road for a considerable distance in advance.

Because a letter happens to appear in a newspaper, it does not follow that it is worth referring to ; and an immense deal of rubbish is written in the sporting papers by persons who think they are qualified to express an opinion upon a subject after the very briefest acquaintance with it. Every one is entitled to express an opinion, but it does not follow that, having done so, their opinion is worth anything. Mr. Hooper's papers, to which I have been referring, are the opinions of an experienced coach-builder ; and although his observations are frequently rather wide of

the mark, and he seems inclined to digress, yet I have only taken such of his observations as are consistent with the subject of this chapter. Mr. Hooper is not so much a man of letters as a man of axles, springs, and carriage-bodies, who is desirous of seeing the work in which he is interested carried out in the most perfect manner possible; in addition to which he takes an intelligent view of other matters not relating to his trade.

In speaking of newspaper correspondents, some interesting letters appeared in the *Field* newspaper of June 10th, 1882. These have the advantage of being written by a man who had some knowledge of the construction of coaches, and are, consequently, worth recording.

WEIGHT OF COACHES.

SIR,—I was brought up as a coach body-maker with Atkinson & Philipson, and have been in their employment for fifty years. I have thus seen the change from road to railway travelling, and can confirm some of the opinions expressed in letters in the *Field*.

I assisted in making many of the heavy stage-coaches of old, and saw the "Telegraph," "Highflyer," and others in course of construction. I assisted, too, in making the "Tallyho;" and in the latter the body was hung on four springs, back and front, without perch. This is the first coach I recollect as having been fitted up in that way. This I suppose was done to reduce weight and keep the body low, so as to prevent the luggage from catching the wind in going over the moors, where some coaches were blown over. I may well remember the weight of the coaches, as it was the duty of the apprentices at that time to assist in bringing them from the "Turf" Hotel (the head coaching quarters at that day) to be examined, oiled, and cleaned, and to take them back at night. At first it required a man and six boys to take them, the coaches then weighing about 30 cwt. When afterwards the weight was reduced to 20 cwt., a man and three boys could take them. These light coaches were famous for their good steady running, and were finished off as perfectly as private carriages. They belonged to the firm, and were run on the mileage system. I also assisted in making Capt. Watson's coach, afterwards sold to Lord Hastings, which was considered a light coach in that day, and weighed about 18 cwt.,

though I cannot give the weight with exactness. And, talking of weight, I may mention that the firm put up a platform weighing-machine to ascertain the exact weight, as they were much annoyed by false quotations. They desired to be accurate, and, indeed, often lost an order by not quoting the weights too low. There seems to be a great change now in the construction of carriages.

WILLIAM LUMSDEN.

3, LEAZES CRESCENT, NEWCASTLE-ON-TYNE, *June 2.*

SIR,—I was connected with stage-coaches as early as the year 1826, when coaches ran between Newcastle and Edinburgh by way of Morpeth, Wooler, and Kelso. The "Highflyer," of which I was guard for twelve years, was built by Messrs. Atkinson & Philipson, of Newcastle, and was considered one of the best running coaches of the day. I can testify to the soundness of its build, requiring little or no repair, excepting in case of accident; its weight was 22 cwt., and it was considered without an equal until the "Quicksilver" was brought out by the same firm of builders. The weight of this coach was only 18 cwt., being the lightest running. It was the fastest on the road, going ten miles an hour. It had four springs, back and front, and a check cross-spring to relieve the others. For some time visitors to Newcastle desired to see this coach, on account of its lightness, and I may say it revolutionised coach-building, and many of the old ones had their heavy perches done away with.

One of the great features of Atkinson & Philipson's coaches was that the builders departed from the old-fashioned lines, and made them on the best mechanical principles; and any one calling at their establishment will find about a thousand designs of carriages, showing all the changes in coach-building during the last hundred years. For more than fifty years I have been connected with coaches, as guard, driver, and proprietor, and always found Messrs. A. & P.'s coaches built of the best materials, and gave much satisfaction. When the "Quicksilver" coach was brought out, it was feared there might be danger to passengers, on account of its lightness; but it did its work as safely and as well as any other. Others, on same principles, were soon after put on the road.

The first patent hand-drag I remember was attached to a coach of which I was part proprietor, and which ran daily between Newcastle and Alnwick. This drag, I think, was brought out by the late Mr. Philipson, who was succeeded by his son, Mr. John Philipson, who is now looked upon by mechanical engineers as an authority on these matters.

JOHN BRAITHWAIT.

ALNWICK, *June 5.*

SIR,—Any one travelling through the Lake district can well remember the style of coaches used twenty-five years ago, and the changes introduced by Mr. Riggs, of Windermere, whose name is a household word to all visitors in the Lake district. The new coaches are kept snug and near the ground, and do not stand higher than the char-à-banc used at the Scotch Lakes, and they have the further advantage of having covered seats for four, available for wet weather.

The small coach built by Atkinson & Philipson, Newcastle, was much talked about at the time, and also one which ran at Ulswater; but both were found quite equal to a heavy load, and were also a great saving to the horses.

The old stage-coach is not to be met with in the northern counties, and, by your ventilating the subject, doubtless the south-country four-in-hands will soon follow the example of having weight-carrying coaches with no more lumber than necessary.

TRAVELLER.

In speaking of C spring carriages, one objection has been urged against them: it has been said that their action affects a coachman's driving. As the body of the carriage sways backwards and forwards alternately, it is said to vary the distance of the driver's hand from the horses' mouths to the extent of several inches, and also, to some extent, sideways. Owing to the play of the springs, the motion of the hand in trying to hold the reins so as to feel the horses' mouths becomes so uncertain that the driver has to relinquish the attempt to do so. By the constant swinging of the body of the carriage that is hung on C springs both in front and behind, the distance between the horses' heads and the coachman is said to vary as much as nine inches; but when only the after body is hung on C springs, and the fore body is on elliptic springs, then the sway of the hind C springs was scarcely perceived by the coachman when driving.

It is very certain that coach-builders understand very little about mechanics. They do not hesitate

to write voluminously upon matters relating to the construction of carriages, but they never, in any case, support their theories by treating such matters scientifically, or proving they are right in their conclusions by reducing them to mathematical calculation. The rule of thumb is apparent throughout their labours, although I believe that a great deal has been done of late years to improve their system of draughting.

The revival of C springs seems just at the present moment to be revolutionising the manufacture of carriage springs, but in all of them the application is indirect, since they are either employed in combination with elliptic or grasshopper springs, and are attached thereto.

Yachtsmen who do not buy vessels, but build them, frequently visit the vessel whilst in the course of construction. If they know anything of yacht-building or designing, although the vessel may not be their own design, they feel that they are well acquainted with the various stages of its creation; they see the parts put together under their own eyes, and when the vessel is sheathed with copper and launched into its natural element, they are conscious that they possess a knowledge of its complete organisation. If there is anything wrong with it beneath water, the part which is affected does not remain to them an unknown quantity, but has been rendered familiar to them by actual observation when in the stages of its earliest creation.

With regard to coaches, the same familiarity might be insisted upon with regard to their construction; and one might even go so far as to say that other carriages—which one drives oneself, or even if driven

by one's coachman—if built to order, might be visited when in the various stages of construction, so that the owner might become familiar with the carriage he is making use of; in consequence of which he would be able to deal with the question of repairs, and not be utterly at the mercy of his coach-builder when time or accident rendered it imperative that the carriage should go into dock. A gentleman and a man of the world should have a smattering of all knowledge and understand a little of everything; there are, of course, subjects a knowledge of which is not necessary, but there is an enormous amount of knowledge which would be extremely useful which hitherto has not been considered as essential to the education of a gentleman.

It is difficult to say what is essential; lately there has been a great agitation amongst bodies of public teachers with regard to the teaching of Greek, some maintaining that a knowledge of Greek is essential to the education of a gentleman, whilst others are equally emphatic in pronouncing it to be utterly unnecessary. So far as regards my own opinion, I think that with such excellent translations as we have of both Xenophon and Homer, it is utter waste of time for a school-boy to attempt a task which has already been accomplished for him. In my opinion, the education of a gentleman should consist of whatever branch of knowledge will be likely to assist him in after life.

A tale is told of a gentleman who brought every one of his sons up to a trade. When I say trade, I mean that of an artisan, such as bricklayer, carpenter, joiner, and blacksmith. At the same time he did not omit to give them an excellent education, which should

qualify them for the position they would doubtless occupy in after life ; but his argument was, that if they were possessed of a knowledge of some trade which might be defined as skilled labour, not even in an over-populated country like England could they ever starve, prove Fortune ever so fickle or Fate ever so adverse.

Before I quit the subject of Coach-building, I would mention the names of those whom I consider the best *coach*-builders. I use the word *coach* as distinct from carriage-building. There are an immense number of excellent carriage-builders in London and elsewhere who would have no difficulty in building a coach if one were ordered of them, but who do not make coach-building their speciality. Amongst men of all professions there are some who are specialists, and the practice of being so is followed amongst tradesmen, coach-builders more particularly. Messrs. Holland & Holland ; Shanks, of Great Queen Street ; Peters, of Park Street, Park Lane ; and Hooper & Co., of 113, Victoria Street, are undoubtedly the best *coach*-builders in London. Messrs. Morgan, of Long Acre, make excellent light coaches ; and Messrs. Allen, of the same address, also have on hand a large number of coaches, particularly after the Derby Day. But if you want the very best article that can be made, you must go to those builders who make coach-building a speciality. In my opinion Holland & Holland, and Shanks, are the two best ; but in the building of carriages of the most elaborate and highly-finished description possible, there is no doubt that Mr. Hooper and Mr. Peters stand pre-eminent.

But it must be remembered that, in addition to being the owner of a coach, the fact of possession is

not sufficient in itself. When once a valuable article like this is acquired, it should be taken care of. Very many persons are unable to do this, not from the want of inclination, but because they do not possess the requisite knowledge. In the first place, carriages suffer greatly when kept in a damp coach-house. There should be ample ventilation; and if the soil upon which the building is erected is naturally moist, a slow-combustion stove should be kept burning during the wettest of the winter months, care being taken that the coach does not stand too close to the stove, otherwise the varnish will crack, the panels will be seriously injured, and the entire carriage will suffer. But a damp coach-house will soon destroy carriages if left standing long within it. It is also a mistake to leave any door of communication open between the stable and coach-house, as the air from the stable, being highly charged with the fumes of ammonia, attacks the varnished surfaces, and, by cracking the varnish, ruins the appearance of the carriage. But the worst thing of all about a damp coach-house is the fear that the carriage-poles may be allowed to rest upon the ground; where this is the case the moisture ascends, and poles of the very finest ash timber, as Mr. Hooper remarks, "very soon lose their hard and elastic qualities." After lying on damp ground it requires but little force to break them, and consequently no reliance can be placed upon a pole that has been subjected to such pernicious treatment. Carriage-poles should, if possible, be placed in racks at the side of the coach-house. For this purpose I have in my stable properly constructed racks; the hooks are covered with leather, and the poles and shafts rest thereon.

Newly painted carriages should not be used until the varnish is fairly hard. Mud leaves spots on freshly varnished surfaces. A carriage should be washed as soon as possible after use ; the mud should never be allowed to dry on, as when it does so it is far more difficult to get off, and when it does come off, the varnish or even the paint frequently falls away with the mud. The mud ought to be well soaked before attempting to remove it. Mr. Hooper advises that a cloth mop, a soft sponge, or a chamois leather be used ; a sponge is what my grooms always make use of. The use of a spoke-brush I have never been able to understand, as were it used for the spokes it would most certainly knock off the paint and varnish. I once had one with a leather back, which was certainly an improvement, as the leather is far softer than wood. I believe these brushes have a tallow candle sewn up inside the back, so that when they are plunged into water and afterwards allowed to dry, the moisture does not destroy the leather. But if a spoke-brush be used, the best one would be with the bristles all round, so that no wooden handle could come in contact with the painted and varnished surfaces. I have a brush with a hollow back and handle ; the back is perforated, and the handle is attached to an indiarubber tube, which, when connected with a water-tap at some height above the carriage to be washed, allows the water to pass between the bristles, the amount of water being controlled by a small tap in the handle which can be turned on or off as desired ; consequently no bucket of water need be used, as the brush is itself a vehicle for conveying water to the muddy parts of the carriage.

As regards the lining of a coach, it should be

thoroughly brushed at stated intervals to get rid of the dust and prevent moths getting into the cushions ; the outside seats should also be beaten and well brushed.

It must be remembered that if a coach-house is damp, the springs, and all the other iron and steel work, will become rusty and in consequence not fulfil their proper duties.

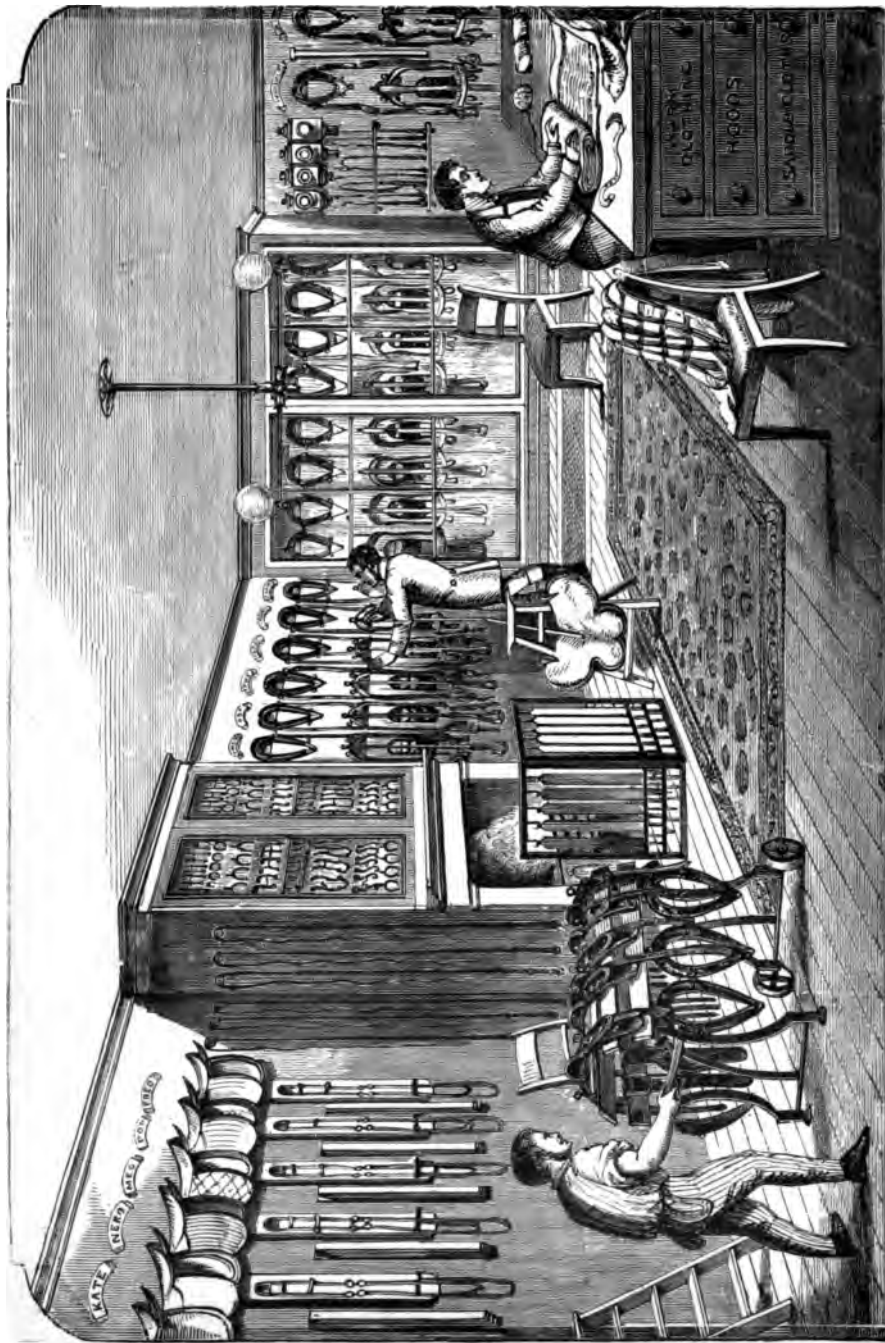
The axle-arms should be carefully cleaned and oiled with the best salad oil about every three months, by a person who really understands what he is about. To do this the wheels will have to be taken off, the coach will have to be raised with a carriage-jack, but what is still better is a Jim Crow, such as is used to raise locomotives when over the ash-pit, and which many locomotives carry with them. These small machines, with a very slight alteration, can be made to raise carriages far better than any carriage-jack. I have one myself, but I never heard of any one else using them for such a purpose ; nevertheless, I have conclusively proved that Jim is a better man than Jack.

All loose bolts and clips about a carriage should be tightened, except those at the end of the springs. Small repairs should never be neglected, as a stitch in time saves nine. If tires of wheels get loose, they should be seen to at once ; if spokes rattle, they should be made fast ; if the washers inside the box of the wheels are worn too thin, they should be replaced by new ones. A good carriage should go to a good coach-builder's once a year, or the coach-builder should visit the carriage and thoroughly examine it ; if he be an honest man as well as a good tradesman he will tell the owner when it does not require repair, yet

the visit will not be wasted, as the owner will have the satisfaction of knowing that he and his friends are riding on a sound vehicle.

All good carriages when conveyed by rail should be conveyed in covered trucks, as they are then protected from dust, smoke, and from rain in wet weather. I remember reading of a coach—I think it was the old Exeter mail coach—that was carried westward by rail, and caught on fire owing to a spark from the engine alighting on the roof, upon which a number of inflammable articles were packed.

I think that this is all I need say about the care of coaches. I only hope that my remarks may be of some service to those who contemplate becoming purchasers of this most valuable of all road vehicles, since it must be remembered that a first-rate, well-appointed coach by one of the best builders costs three hundred guineas.



A HARNESS-ROOM FOR A LARGE ESTABLISHMENT, AS PLANNED AND SUGGESTED BY THE ST. PASCAS IRON-WORKS COMPANY.

CHAPTER X.

HARNESS.

Oak-bark tanning—Oil your leather—Reins—Horse beats horse—
Patent leather—Much harness unnecessary—Comfortable harness—
Don't use bearing-reins—A natural balance—"Sit on his 'ead"—
Look to your reins and bridles—Care of harness—
Harness should fit well—Harness-makers.

THE celebrated coaching song of the last century was
"The Tantivy Trot." It ran as follows :

Here's to the arm that can hold them when gone,
Still to a gallop inclined, sir ;
Heads in the front, with no bearing-reins on,
Tails with no cruppers behind, sir.

If this was the coaching song of the last century, it only proves that the coachmen of those days had more good sense than is possessed by their grandchildren and great-grandchildren, the coachmen of the present day. This verse exactly expresses my own opinion as to bearing-reins and cruppers :

Heads should be to the front with no bearing-reins on,
Tails with no cruppers behind, sir.

All those persons who drive four horses should know something about harness ; and, in fact, any one

who intends driving frequently and possessing harness-horses of his own, might very well, for once in a way, condescend to inquire into the nature of a material of which he makes so great a use. The hides of steers or heifers make the best leather for harness after being well tanned with the bark of the oak-tree, which a writer on the subject says imparts a light brown colour to the leather, makes it firm with an even grain, and, to a certain extent, allows the hide to retain its softness. There are many methods employed in tanning leather ; but many produce a rough hide, and cause leather to swell after being exposed to rain. There is no process equal to oak-bark tanning ; by its use we obtain the lightest, strongest, and most pliable leather ; it is closer grained, and is dressed better after use. After tanning, the hide is termed "rough leather," and from this the various kinds of harness are produced. Merely tanning leather will not, however, fit it for the harness-maker's use ; it must be subjected to another process, termed "currying," by which the leather is made soft, pliable, and durable. As harness-makers require their hides as level as possible, those that are smooth, free from cuts or injuries are chosen for the best harness or rein leather, and being exceedingly difficult to obtain, they are worth twenty per cent. more than an ordinary hide of equal weight. After going through several processes the hide is laid out on a table, and dubbing (a mixture of tallow and cod-oil) is applied to it ; after this it is hung up to dry, but not until the dubbing or oil is made to penetrate every pore, whereby the hide is rendered still more pliable and durable, and in a capital state to resist wet. And it must be borne in mind that leather, unless it possesses a certain amount of oil,

very quickly perishes, and is incapable of resisting strains or withstanding wet. Some people in cold, wet weather are in the habit of putting their feet to the fire when they have their boots on. It is a great mistake putting the soles of boots anywhere near the fire unless they are really wet, as the heat of the fire causes the leather to dry up and perish, and it is then no longer capable of resisting moisture. Consequently, a pair of boots which withstood the wet and kept their owner dry-footed, may, by being placed too near the fire, be deprived of the essential oil which gives it that most valuable quality of resisting wet. I have mentioned boots in order that I might make coachmen understand better the grave necessity there is for keeping leather soft and pliable, and possessed of vitality; as it must be remembered that the safety of a carriage and the persons thereon or therein are dependent on the strength and durability of the harness, especially the reins and bridle, which are the particular parts by which the horses are controlled and held in subjection. The writer to whom I have referred says: "Both black and brown harness leather has to be dressed to the proposed colour before it ever reaches the harness-maker."

It is worthy of notice that the harness made by first-class large firms is decidedly better than that produced by small country harness-makers, because the large dealer usually cuts out a number of sets of harness at one time, and has a variety of hides to choose from; he is thus enabled to use only such parts as are most suitable, such as backs for traces and other heavy strapping, the under part of the hide for lighter portions of the harness; but the small country maker cannot exercise such discretion, as he has not the

requisite leather to choose from, unless he keeps a stock of material utterly disproportioned to his business. This writer, continuing, says that "the properties of leather may be completely spoiled by injudicious cutting; the grain should always run parallel to the cut, otherwise the leather will stretch directly it comes into use and continue to do so. Brown leather, which we use for reins, is in every respect the same as harness leather except in colour, it being bleached instead of blackened, and afterwards stained a light shade of brown." There is no part of a harness which requires more attention than the reins, as were they to break, even when driving a donkey, and all control were lost over that humble quadruped, a very serious accident might ensue; in addition to this, the hand-parts of reins should possess great softness and pliability, as nothing tires the hands so much as having thick, clumsy reins that will not bend when the hand is closed. Yet reins should be very strong. "Sometimes the hand-parts of reins are made of white leather; this leather is obtained from the hide of the horse, bleached and dressed in a solution of alum to preserve it. White leather, however, is not fashionable, and it is more generally used for whip-thongs."

It is a strange thing that when a horse dies his skin should be made into whip-thongs, that he may thereby unconsciously be the means of inflicting punishment on his fellow horses; so that, when the lash is brought down heavily on the flanks of some patient and industrious animal, it is within the range of possibility that, if the horse from whom this thong was taken could only know the suffering his hide has been instrumental in inflicting upon his fellow beast, his ethereal bosom would be rent asunder with grief and

remorse. It seems a strange thing, when we consider it, that we should take the hides of dead horses—the hides upon which the lash may so often have descended—to make more lashes to beat more horses, whose hides will, in their turn, be made into thongs to beat future generations of horses, and so on through successive periods of time till the chapter ends—until the merciless drivers have passed away from this world, and the spirits (if they possess any) of the patient beasts who have been subjected to their lashes have departed to the spirit-land where all good horses rest in peace and tranquillity.

To those who love dumb animals, it is satisfactory to suppose that there is such a spirit-land, where horses, relieved of harness, dwell in happiness and comfort ; where dogs wear neither muzzle nor collar ; where no link of a dog-chain has ever yet been forged ; where M. Pasteur, in common with other vivisectionists, is held up to universal execration ; where low, fierce growls accompany the mention of vivisectionist names, which could these merciless votaries of science hear, would make these searchers after knowledge relinquish all further attempts at solving such scientific problems. It is probable that the untutored Indian thinks and cares more for his horse and dog than do many civilised beings. Pope says :

He thinks, admitted to that equal sky,
His faithful dog shall bear him company.

And again he remarks :

Go, like the Indian, to another life ;
Expect thy *dog*, thy bottle, and thy wife.

But to return to the question of harness, one thing a coachman must always bear in view, which is, that it

must be made as light and easy as possible for the horse, at the same time to be sufficiently strong to secure perfect safety. By bearing this fact in mind we shall best contribute to the animal's comfort.

A writer on harness says : " Japanned leather is best known as ' Patent leather ' ; it is made from specially selected hides, tanned with more than ordinary care ; after being tanned the hide is split, some hides yielding two or three splits, according to the thickness of the leather. In the manufacture of patent leather there are many processes of an extremely delicate nature, chief amongst which is the application of varnish, to receive which the leather is stretched out tightly on a board. The quality of patent leather is dependent upon the state of the atmosphere when japanning ; this should only be done during cold weather, otherwise it will crack on exposure to cold.

" Leather that has been tanned with chemicals is usually red in colour, but it may be bleached to resemble tanning with oak bark : when chemicals are used, the natural strength of the hide is usually destroyed in the tanning pit, and though such leather is cheaper than that which has been oak-tanned, it is nothing like so strong or so durable."

Furniture is a name applied to the metal foundations of harness ; this includes hames, terrets, rings, buckles, saddles, and the metal foundation of blinkers. The mountings may either be plated or brass, according to the taste of the owner. In my opinion brass looks best, and plated mountings are objectionable owing to their cost ; if of brass they should be made solid. Nickel mountings are coming into use.

The hames and kidney links, when the mountings

are of brass, are of course too large to be made solid, and if they were, would not be sufficiently strong; consequently they are made of iron plated with brass.

Covering harness furniture with leather has arrived at some perfection, but if it be iron that is covered with leather, and the weather is often wet, it is apt to rust through the leather.

As regards bits, purchasers should reject everything but the best steel bits; they are much safer, and will last much longer. Although one would suppose it to be a matter almost unworthy of consideration, yet the quality and make of the thread used in stitching harness should be subjected to careful scrutiny. Nothing exhibits a greater proof of good harness-making than neat and tightly drawn stitches, made with the best flax thread well and carefully waxed; cheap harness is frequently made with a sewing-machine, but hand-made harness is more durable, and is altogether better, in the same way as hand-made boots are better than those made by machinery.

With four horses there should not be more harness than is actually requisite; with a good brake no breechings are required, and loin-straps are not a positive necessity. Cruppers, if worn, should never be too tight, bearing-reins should be dispensed with altogether, and the pole-chains sufficiently loose to allow of the horses going freely, otherwise they will be too closely tied to their work, and their action and pace will be destroyed. The bits should not have high ports or be in any way severe; nothing is better than a plain Liverpool bit with a short cheek or branch, but of course the bits throughout the team should corre-

spond ; it is well to have a bottom bar across from one cheek to another, as it is handy for a groom to catch hold of, particularly with leaders. The blinkers should be well hollowed out so as not to hurt the horse's eyes. There have been numerous trace buckles brought out lately, and in fact Mr. White, of Bishopsgate, twenty years ago patented a peg and slide which was exhibited at the International Exhibition of 1851, and I do not know that anything much better has been done since then. It lies flat, and allows the trace to be let out and taken in very easily. Messrs. Lennan & Son, of Dublin, have recently patented an improvement on White's invention.

The blinkers should never press upon the eyes, but be wide apart—but not so wide as to flap about. The only intention of the blinker is to protect the eye from the lash, to prevent the horse from shying at objects with which he meets, or from seeing the carriage behind him.

The cheek-strap in harness should never be too tight ; the bit should be placed firmly but comfortably in the horse's mouth, but not in any way to inconvenience him.

One of the most important things about a horse's harness, and which requires the very greatest care and consideration, is his collar ; it should be well made, not stuffed too hard, but with plenty of elasticity ; it should rest perfectly easily upon the shoulder-blade or scapula. When the collar is on, there should be room to place one's hand easily between it and the chest of the horse. The collar should never be put on or taken off with the hames on ; the hames should be first unbuckled, the collar will then yield to the horse's head. To attempt to push a collar over a

horse's head with the hames on is a gross act of cruelty; the collar cannot yield when held fast by the iron hames, and not only is a horse likely to lose his eyesight, but he must suffer very much when a clumsy groom is forcing a collar over his head in this manner.

The shape of the pad is another matter which deserves close attention. If a pad is not made on a suitable tree, and stuffed to suit the shape of the horse's back, so as to bear on the fleshy part of the back and not on the spine, it causes the animal great inconvenience and suffering. The pad should fit so closely as not to roll about, and yet the belly-band or girth should not be too tight.

As regards the bridle, this is one of the most important details of the harness. Bridles can generally be made to fit various-sized heads by means of letting out or taking up the straps a few holes, but care should be taken that the blinkers do not chafe the horse's eyebrows.

No bearing-rein should be used on any account whatever; it is a most abominable practice. A horse, if he be worth anything, and has good shoulders, will hold his head well enough without any bearing-rein; and the whole position of the animal will be more natural and more graceful, and he will be less likely to fall, and, if he does fall, will be better able either to recover his balance or get up again. A horse, when he starts a load or mounts a hill, when left to himself, lowers his head and throws his weight into the collar, but if his head is held up in the air, he cannot employ the same mechanical force. Even on descending a hill a horse needs the free use of his head to act as a counterbalance; and it may be remarked by any one who has observed a horse turned out in a field on

the slope of a hill, that, when he gallops down hill, his head is not stuck up in the air so that he cannot see where he is going, but is held in a natural and suitable position, and one best qualified to maintain his balance. I am told that even a dog's tail is of use to him in maintaining his balance when running, and, when observing greyhounds coursing, one is almost inclined to believe that this is the case, and that they who shorten a dog's tail deprive him of an appendage which is exceedingly requisite to him ; in fact, Nature provides nothing that is of no use, although it may be exceedingly difficult for us to understand the use of everything which the Deity creates. Yet we may be certain that every animal, and every part of an animal, is created for some wise purpose, and that nothing would be created that was simply superfluous and unnecessary—not even a dog's tail ; and to see dogs mutilated by having their tails cut off, as is frequently the case with terriers and sheep-dogs, fills me with disgust.

A horse, when down on the ground, always raises his head before attempting to rise ; were his head confined by a bearing-rein when in this position, I doubt if he could get up at all. A horse is certainly not so liable to stumble when he has no bearing-rein as when he has one. I believe, if one only had the nerve to do so, it would be safer to gallop down a steep hill when riding with a loose rein than with a severe bit pulling the horse's head up into the air. When a horse in harness falls down in the slippery London streets, and a crowd collects, there is always some individual in that crowd who, anxious to display his familiarity with equine matters, cries out, " Sit on his 'ead !"—which operation is very often performed in a very thoughtless and cruel manner. The person who condescends to do

so seats himself upon the poor horse's head, very often upon the blinkers, which he presses against the animal's eyes. I remember seeing a horse fall down at the bottom of the Haymarket one afternoon; and when I suggested that the animal's head might be kept down without gouging his eye out, I was asked what I knew about 'orses, and whether I would like to sit upon his 'ead myself? Seeing that remonstrance was in vain, and that interference in such a matter had procured me an unenviable notoriety, I walked away, by doing which I no doubt manifested a considerable want of moral courage; but it is almost useless to interfere between horse and driver unless the latter is known to you, or you to him, in which case, of course, matters would be different; but any attempt at interceding with a driver for the better treatment of his horse is likely to have a result exactly opposite to that which you desire, in addition to which you are probably favoured with an amount of unparliamentary language which is by no means edifying.

But to return to the question of harness. Cruppers, as well as bearing-reins, are iniquitous things if used improperly—that is, if they are too tight—as they cause great injury to the horse's spine. The only use of a crupper is to support the loin-strap or breeching, and to prevent the pad from slipping too far forward; but a horse with high withers, and a good girth just behind the shoulder, is so formed that the pad cannot ride forward if properly made and properly strapped on and adjusted. A badly-made pad will frequently rock about and get out of place. When this is the case the crupper does assist to keep it in its place; but when a gag bearing-rein is used in connection with a tight crupper, then the horse is practically in a vice, and the person who so

harnesses him, and is instrumental in causing such suffering, is either a demon or a fool.

A coachman's control over his horses depends entirely upon reins, bits, and bridles. A horse may kick himself free of everything else, but provided the reins, the bit, and the bridle hold fast, he still has some control over the animal ; but if the reins were to break, there is no saying what might happen. Possibly the driver, and those whom he was charioteering, and his team, might one or other of them be killed ; and it would be as bad if any part of the bridles were to break or give way, as the reins would then be rendered useless. It is of the greatest importance that reins should be of the best leather ; they ought, in all cases, to be of single leather, as then the slightest flaw or crack on either side can be easily detected ; the hand-part should be made rather light, as I mentioned before, and be soft and pliable. New reins are generally slippery ; to prevent this, they should be washed in warm water, then be allowed to dry, and then rubbed with powdered resin ; but I do not approve of wetting leather if it can be avoided, as that very slipperiness proves that the essential oil in the leather has not evaporated.

As regards bits, I do not much fancy sliding mouthpieces, as one side is apt to get up whilst the other remains down ; besides which, if a bit is buckled on properly and rests easily in the horse's mouth, there is no need whatever to have a sliding mouthpiece.

Bad stitching is often the cause of an accident with harness ; this should be carefully seen to. Whatever may be the value of four coach-horses, the style of the coach, the reputation of the coach-builder and harness-maker, or the skill of the coachman, a coach and four

horses never look well unless the horses, the harness, and the coach are well cared for ; this being the case, owners of four-horse coaches, besides driving them, should give an eye to the proper treatment of their possessions. It is not absolutely necessary to clean harness, as is the case with carriages, after each time of using ; if there be no mud and only a little dust upon the harness, it will be sufficient if the dull leather is well brushed with composition, and the patent leather and buckles, terrets, and other mountings are dusted with a dry rag ; but any parts that show signs of sweat from the horse must be wiped with a wet sponge, especially the insides of the collars, the pads, and the girths. After this, the patent leather should be rubbed over with a greasy rag dipped in neat's-foot oil. Should the harness be muddy, each part must be taken separately and washed, great care being taken with the patent leather, which must be dried with a soft chamois leather ; the dull leather must also be wiped, but with another chamois leather, after which it must be blacked.

In cleaning the mountings of brass or silver plate, leather guards should be used to protect the patent leather upon which the brass or silver-plated furniture is mounted ; in some stables a piece of flannel moistened with lemon-juice is used to clean brass mountings. Three brushes are necessary in cleaning harness : a hard brush to remove the dirt, a soft brush to apply the blacking, and a hard brush for polishing. When the blacking has been applied it should be left exposed to the air to dry ; as soon as it acquires a dull or bluish tint, it is ready to be polished ; when it has been polished a little, then some beeswax may be applied, in order to render it waterproof ; it will then become so

brilliant that even rain cannot dim its lustre. The best waterproof blackings are made of beeswax mixed with other things and made into a paste ; this blacking is waterproof, but if turpentine or naphtha be employed it is not good for leather. The prepared blackings of Harris or Harding are the best that can be procured.

A writer upon harness remarks that the best blacked and polished harness he ever saw was in the harness-room of H.R.H. the Prince of Wales, where he learnt that nothing but Everett's Liquid Blacking, the same as employed for boots and shoes, was ever used ; but then the head coachman was a person to be relied on, since he took care that his subordinates should work properly.

Patent leather must be oiled occasionally, or it will crack.

I do not propose to speak of clothing or stable requisites, but have merely mentioned harness, since I am speaking of all those things that appear on the road, and not those which may be observed within the walls of a stable. When harness is ordered it ought, if possible, be made specially to fit the horses for which it is intended ; each horse should certainly be measured for his collar, his pad or saddle, his bridle, and his blinkers. Some people who are very particular have had bits made specially to fit certain horses ; in fact, a gentleman named Von Weyrother, formerly chief of the School of Equitation at Vienna, invented a special instrument for ascertaining all the necessary dimensions of a horse's mouth. I think that this instrument can be obtained of Messrs. White & Coleman, of Bishopsgate Street, London.

The late Mr. Edward Flower, of Hyde Park Gardens, directed his attention to the unsuitable bits

and bearing-reins in common use, and, by constantly agitating the matter, established his reputation as a reformer in matters appertaining to driving ; and yet the singular thing is that our forefathers did not use bearing-reins, sometimes even did without cruppers, and, in the hunting-field, never rode a horse with anything except a plain snaffle-bit, as may be observed by examining the old sporting prints of a hundred years ago.

As regards the price of four-horse harness. A complete set of four-horse harness, with silver-plated mounts, Queen's (or any other pattern) blinkers, chain or enamelled leather fronts, chased rosettes, or with crest or monogram, shifting mouth Buxton or Liverpool bits, straight or swelling pads, covered hames, all double buckles (except for bridle or collar-buckles), complete with martingales or breast-plates and loin-straps, hand-sewn all through, with flat reins, costs about sixty-six pounds. This includes martingales or bridoons and loin-straps ; but as bridoons are only used for bearing-reins, I do not think them necessary, neither are martingales or loin-straps positive necessities. A brass-mounted four-horse harness of the best kind, with all necessary furniture and fittings, costs about sixty pounds.

As for the choice of a harness-maker, that is a matter best left to my readers ; but if price be no object, and good material and workmanship is the principal thing to be considered, one cannot do wrong by employing any of the first-rate West End firms, such as Wilkinson & Kidd, 5, Hanover Square ; Samuel Merry & Co., 21, St. James' Street ; John Sowter, 18, Haymarket. But if a cheaper set of harness is required, there is Mr. Davis, 10, Strand,

who is noted for his astonishingly low-priced and serviceable harness and saddlery ; and if it be that something a little out-of-the-way in breaking-tackle or bit or harness to suit an unruly animal is required, then Mr. Blackwell, of 469, Oxford Street, will be certain to suit all one's requirements. But for bits pure and simple, and nothing else, there is no one in London and elsewhere who excels more in this particular department of the harness-maker's trade than Messrs. Latchford, of Upper St. Martin's Lane, exactly opposite Aldridge's.

NOTE.—I hope that the above recommendations do not sound too much like a tradesman's circular ; my only object in naming the establishments where coaches and harness of the best description can be procured, is to enable such of my readers who are unacquainted with such matters to obtain what they require without the trouble of seeking for information on the subject, with the possibility of being misled by some too confiding and inexperienced friend. At the same time I admit that my very comprehensive list of tradesmen somewhat resembles the circulars one receives at Christmas and Midsummer, that run as follows : "We beg to offer our respectful thanks for past favours, and trust by the strictest attention to business to merit a continuance of the same."

CHAPTER XI.

COACH-HORNS AND WHIPS.

Variety of horns—How to blow—"Way for the coach"—The rule of the road—Coach-horn calls—A heavy lash and a long stick—Whip and coach-horn makers.

THE first horn that was constructed was undoubtedly from the horn of an animal, as the name denotes, horn being a general term for all hard and pointed appendages on the heads of animals and even insects; but the modern coach-horn so entirely differs from the horns of animals—so contrived as to form a musical or unmusical instrument as the case may be—that it is with the greatest difficulty we remember the original signification of the word.

The hunting-horn (the *cor de chasse* of the French, the *waldhorn* of the Germans), a brass or copper tube gradually expanding into a bell-shaped mouth and bent into a semicircle, was for a long time the chief form in existence.

By lengthening or shortening a long tube-like horn, unprovided with notes, the key can be transposed.

An old guard, who writes upon the subject of coach-horns, calls attention to the fact of the difference

existing between post and coach-horns by saying: "The coach-horn is now the only recognised horn used on a four-in-hand coach; but the post-horn, fifty or sixty years ago, was the recognised signal-horn used by all the guards on the fast mail coaches, hence the name post-horn."

A coach-horn should always be perfectly straight, and be made of copper, with German silver or real silver mouthpiece and mountings. Lately a telescopic horn has been made, which allows the top half, or rather the mouthpiece end, to slide inside the lower portion of the horn, on the same principle as the portable metal drinking-cups. The tone and ease with which these horns can be blown is not in the least affected by this arrangement. There are many advantages about this plan, as a very long horn may, on this principle, be so telescoped as to occupy a very small space, and is less likely to get bent, dented, or otherwise injured, and is more easily packed and carried about.

The guard whom I have mentioned says that "a coach-horn should not exceed thirty-six inches in length, or else the peculiar ring or note (musicians would call it the *timbre*) of the true coach-horn becomes lost, and merges into that more resembling the field-bugle used in the army." And yet many good coach-horns are used measuring forty-six inches in length, and even longer than this; but such long horns are not always used for show, but because they are easier to blow, not the same notes, but a greater number of notes upon them.

The habit of calling the coach-horn the "yard of tin" arose from the fact that it really was a yard, or thirty-six inches, of tin, many of the old horns on the



inferior coaches being made of tin, and not of copper or brass. The old key-bugle was sometimes used on the best mail coaches by such guards as could play it, and upon this instrument they would enliven a journey with the popular airs of the day. The post-horn, which is identical with the tandem-horn of the present day, is only thirty-two inches in length, and is generally made of brass, and not of copper. A proper post-horn ought always to be made with a slide, to elongate it, if necessary, for tuning purposes.

Five notes can be produced on the coach-horn, viz.:



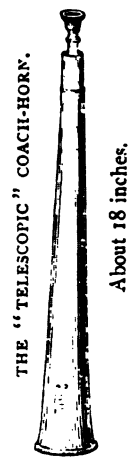
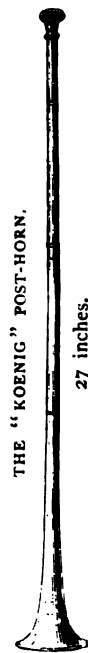
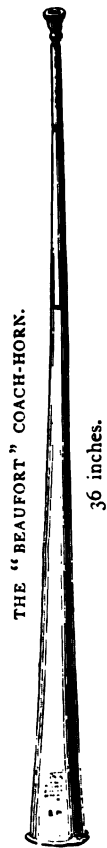
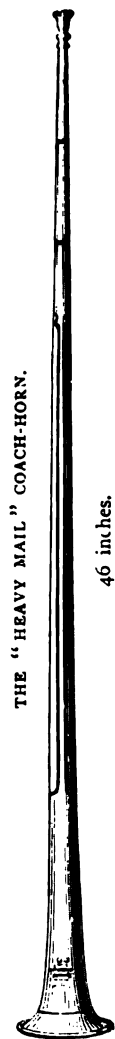
Upon the post-horn an old guard says four notes are all that can be sounded with ease, and indeed it is seldom that more than three notes are used. On the coach-horn at the first trial, most persons will produce the note G, but after a little practice, by compressing the lips more tightly the upper notes will be obtained. A very little alteration in the position of the lips will do this, but to produce the lower note, C, it is necessary to relax the lips so that they are wider apart. When blowing a horn outside a coach and the wind is high, it is advisable to turn one's face away from the wind, as by doing this, one can blow with far greater ease.

It should be remembered that a coach-horn, when on a well-appointed coach, should not be used unless it be positively necessary to clear the road of the innumerable omnibuses, cabs, and other vehicles that block the way in the streets of a crowded thoroughfare, rendering it almost impossible to drive a team with

comfort without the aid of the horn. I think every coachman will admit that at the sound of the horn, cabbies and omnibus drivers, coachmen in and out of livery, and every one who is driving any vehicle whatsoever, as a rule promptly and civilly respond to the request which the horn conveys that they will make "way for the coach." But where the guard is known to sound the horn without occasion, like the cry of "Wolf, wolf," then drivers are not so ready to respond to it. It must be remembered that a gentleman's private coach, or even a public coach, is not a travelling circus, and therefore it is not necessary to proclaim the fact that you possess a horn, and know how to blow it, more than is positively necessary. It is far more excusable on a public coach than a private one ; but it must be remembered that the very fact of making a loud noise by the blowing of a coach-horn calls immediate attention to the existence of yourself and your coach. It is as much as to say, "See what a smart coach I have, and how well we can blow our horn !"

As regards tandem-driving, there is nothing more pitiful than to see the use that is sometimes made of a horn. It may be that you are walking along a deserted high-road when you suddenly hear a discordant sound, resembling, as nearly as possible, the groans of a dyspeptic cow. These sounds are well calculated to turn all the milk in the neighbourhood sour. From such a noise one naturally does not expect any very imposing sight to follow, so that one is not surprised, on lifting one's eyes, to observe a very badly-turned-out tandem, with the driver right about it, but everything wrong, and the horn as an indication of having been hired, at so much





THESE HORNS ARE MANUFACTURED BY MESSRS. KÖHLER & SON.

[To face page 457.]

by some youths just released from the counter of a shop.

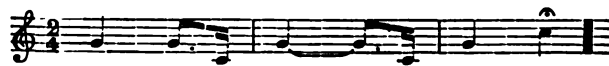
But to speak of the real thing, and not of such base impositions, there are certain times, when driving four horses, or even a tandem, when the horn may be used without exciting any adverse criticism. It is well known to all coachmen that, when horses in a team have settled down, and are all trotting together well up to their bits, nothing is more vexing than to be compelled to pull them up, and so have to begin all one's work over again, because some vehicle of heavy draught, such as a country waggon, a brewer's dray, a heavily-loaded van, or a lot of empty cabs, impede the way, and, getting over the wrong side of the road, refuse to pull aside. On such occasions as this a coach-horn may be used to one's heart's content, otherwise one may have to wait a very long time before the road is clear; consequently, if on a journey with such hindrances, there is no saying what length of time may be occupied in performing it. Frequently, on country roads, one's way is impeded by covered waggons, the drivers of whom are very often fast asleep, when it seems that nothing short of a dynamite explosion will wake them up to a sense of their responsibilities.

Much of my time when driving is spent in remonstrating with such people, to whom the rule of the road is evidently "a paradox quite," or it may be that, having no varnish on their own vehicles to destroy, they are indifferent to the fact of your anxiety on that score; besides which, to charge them like the chariots did one another on the battle-fields of old, would be like knocking one's head against a wall, as it would be you that suffered and not they.

The guard to whom I have referred has stated that the following coach-horn calls can be easily blown with a little practice, and that each conveys an observation intended either for the coachman, the horse-keepers (where the change was to be effected), or the gatekeepers of the various turnpikes on the road. If the gate happened not to be quite wide enough open for the passage of the coach the horn had to be blown ; but the coach never pulled up, as a fixed sum was paid yearly by the coach-proprietors to the turnpike trustees :

COACH-HORN CALLS.

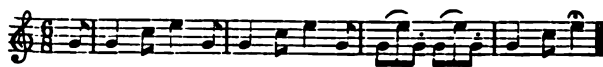
No. I.* THE START.



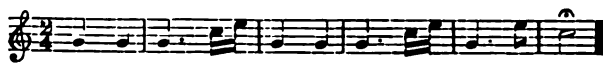
No. II.* CLEAR THE ROAD.



No. III. OFF SIDE.



No. IV. NEAR SIDE.



No. V. SLACKEN PACE.



COACH-HORN CALLS.

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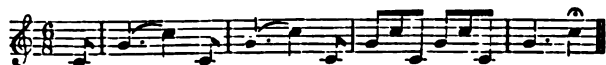
No. VI.*

PULL UP.



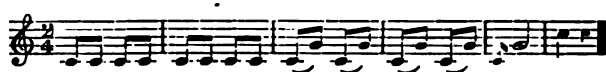
No. VII.*

CHANGE HORSES.



No. VIII.*

THE POST-HORN CALL.



No. IX.

HIGHER UP.



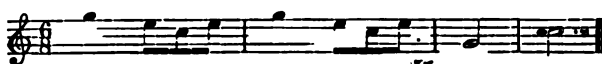
No. X.

A RUSTIC CALL.



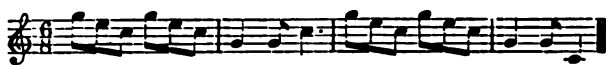
No. XI.

STEADY.



No. XII.

HOME.



These Calls can be repeated ; and all those marked * can be sounded on Post-horns as well as Coach-horns.

In speaking of whips, I have nothing to guide me except my own experience. I think it is a mistake to have too heavy a whip, as it tires the hand. I like a good heavy thong, as it can be more easily thrown and caught than a light one, particularly in a high wind; and there is no doubt that a long stick is advantageous in more ways than one, as it enables one to reach one's leaders with greater ease, and certainty of hitting them just where you desired. I do not like the thong to be too thick close to where it is attached to the stick; in my opinion it is better when it is not much graduated, but nearly the same size all the way down, terminating in a thick, heavy, whip-cord point; the quills round which the thread is bound should be very strong, as it is here that frequently a whip will break when double-thonging one's wheelers. I always prefer a holly stick with plenty of knots, to which a whalebone continuation is attached, which acts as an intermediary between the stick and the thong; this whalebone gives the whip an immense amount of elasticity and enables one to throw one's lash with the greatest precision, whilst the knots on the stick allow of the lash being caught and held so as to form a loop with which to strike one's wheelers if necessary.

The handles are frequently now covered with seamless leather; this, I am told, is the skin from the tail of some animal drawn over the stick, after which it undergoes some process to give it the requisite finish.

It must be remembered that the stick should be as straight as possible; nothing looks worse than a stick that is bent.

Good whips when not in use should be hung up on a whip-holder, screwed to the match-boarding on the

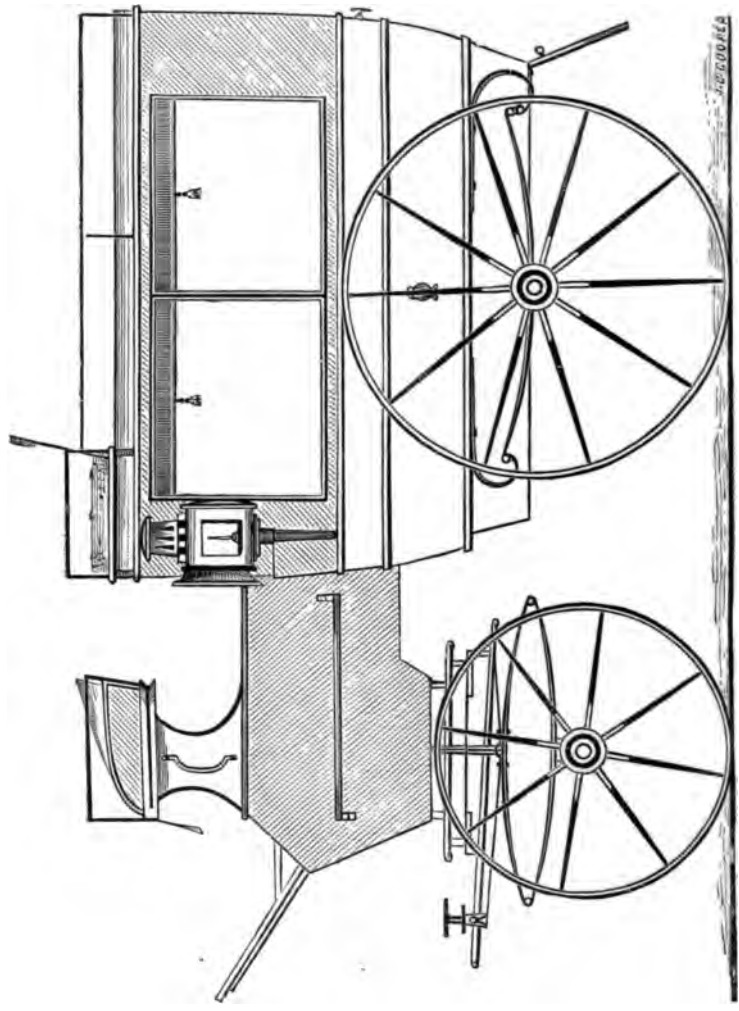
harness-room wall ; they should hang perfectly straight. These whip-holders are turned in a lathe, and are generally provided with one or two grooves for the thongs of the whips which are suspended to them. When the sticks are very much bent or the thongs are very much twisted, it is well to hang a small weight on to both the thong and the stick, and leave it for some time ; this will straighten out the lash, and make the stick straight also. A good whip should never be leant up against a wall, as if it is allowed to remain there any length of time, however straight it may be in the first instance, it will soon become bent.

Some of the best whip-makers sell an excellent portable whip, which can be unscrewed in the centre, and is then laid on a flat, narrow mahogany board purposely made to receive it, to which it is afterwards secured by straps ; consequently, any coachman provided with such a whip can always carry a spare one about with him in case of accident. Every coachman must be aware what an advantage this is, as although I do not advocate the too free use of the whip, yet there are times when not to make use of one's whip would endanger the safety of the coach and its occupants.

I do not think I need say anything more about whips or horns except to mention that Messrs. Callow & Son, of 8, Park Lane, Piccadilly, and Messrs. Swaine & Adeney, of 185, Piccadilly, are, so far as my knowledge goes, the best whip-makers, although there are, no doubt, others who do their work in a first-rate manner. I have bought whips of James Schomberg, 122, Long Acre, who makes whips his speciality, and who has given me perfect satisfaction. J. Wilkinson, of Spa Road, London, S.E., used to supply the seam-

less leather handles, but I have no doubt they can be obtained of all good whip-makers; there is this advantage about them, that they look well and are more comfortable to hold.

As for coach-horns, I know only three good makers, although there are, no doubt, many more; these are Messrs. Köhler & Son (established 1780), of 116, Victoria Street, Westminster; H. Potter & Co., 30, Charing Cross, and Arthur Chappell, 52, New Bond Street; but were I asked, I think I should be inclined to say Messrs. Köhler stand pre-eminent as the makers of all kinds of horns, particularly coach-horns, to which they seem to have given a great deal of attention, and whether it be the post-horn of twenty-seven inches, the Beaufort coach-horn of thirty-six inches, the heavy mail-coach horn of forty-six inches, or the telescopic horn of unlimited length, Mr. Köhler will supply you, and, moreover, will teach you how to blow it. Consequently, having said this much, I think I may take leave of my readers: veteran coachmen, coachmen who aspire to the bench and to the handling of the four ribbons, and those who are interested in the subject, not because they were, are, or intend being coachmen, but because over all that concerns the roads and the wheels that travel thereon there exists for them a certain amount of indefinable interest, since these still afford an avenue for locomotion, and so long as the world lasts we, its inhabitants, will roll about it, unless in course of time some other means of progression be substituted for that of travelling on wheels over the highways and byways of the world.



A PRIVATE OMNIBUS, SUITABLE FOR DRIVING FOUR HORSES.


[To face page 463.]

CHAPTER XII.

CHIT-CHAT.

A private omnibus—A miniature drag—The price of horses—Fifty years ago—The world on wheels—Thompson's cyclometer—The Wealemeftna—Nature knows best.

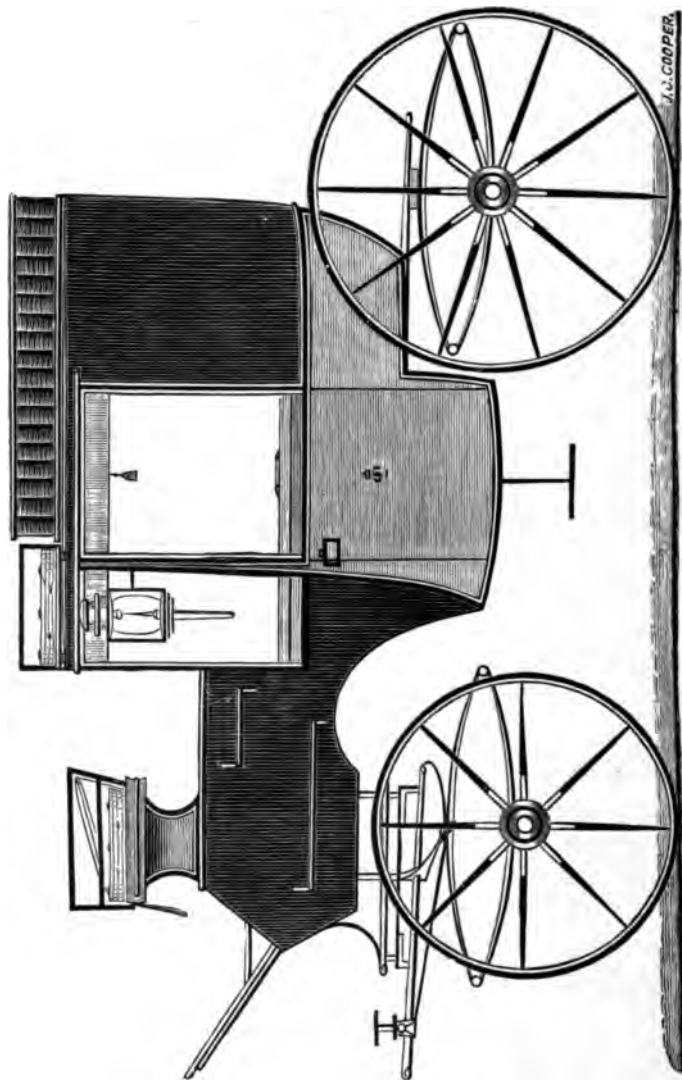
WHATEVER a coach may be outside, it must be far from pleasant riding inside on a fine day, as there is no carriage with which I am acquainted that possesses a more gloomy interior. In this respect the old coaches used to be far worse than those built at the present day ; and when George III. was king, it required considerable agility and dexterity to mount the steps leading to the interior of a coach, the body of which was hung very high, particularly the mail coaches ; and when the passenger had safely deposited him or herself on the hard, uncomfortable seats therein, the windows being high up in the doors, they found themselves, when the doors were closed, in semi-obscurity. Of course, so far as regards outward appearance, nothing can compare with a coach ; the very shape of a coach conveys to one's mind the idea of four horses, and all the stylish, business-like paraphernalia of the road.



Yet in point of comfort for inside passengers a coach compares very unfavourably with a private omnibus, but an omnibus has no outside seat suitable for grooms or guard; besides which it cannot carry the same number of persons outside, and as for appearance, however well built, it cannot compare with a coach. Why this is, it is difficult to say; possibly our eyes have become so accustomed to a coach in connection with four horses, that we can tolerate no other vehicle, whilst an omnibus is associated in our minds with a public street conveyance, with a ride all the way from Charing Cross to the Bank for twopence, with such frequent stoppages to take up passengers that a very natural contempt for this pottering mode of progression fills our minds. However this may be, a coach, for the reasons I have named, is preferable to an omnibus; but lately I saw a very excellent elevation drawing of what may be called a station brougham, patented by Messrs. Cockshoot & Co., of Manchester.

It is in my opinion a most excellent carriage, but with carriages and harness, as I have before remarked, one has to overcome very strong conservative prejudices which stand in the way of their adoption; the fact of being seated in any strange vehicle and forced to remain still, deprived of the power of volition, the observed of all observers, is particularly repugnant and distressing to the feelings of civilised mankind, especially to Englishmen. The first man who carried an umbrella must have been possessed of greater courage than the winner of a Victoria Cross, although the quality, or rather the nature of such courage was scarcely the same.

It is uncertain who the person was who evinced this remarkable resolution, although an umbrella was



A STATION BROUGHAM OR MINIATURE DRAG, BY MESSRS. COCKSHOOT, OF MANCHESTER.

[To face page 465.]

first used in Edinburgh in 1780, but Swift says in the *Tatler* of October 17th, 1710 :

The tucked-up seamstress walks with hasty strides,
Whilst streams run down her umbrella's sides.

But to go back to our subject, or something more nearly akin to it.

The carriage of which I have spoken is an excellent substitute for a coach, where a very light vehicle is required, and where the passengers are in all cases few in number ; the only alteration that would be required to enable four horses to be driven with comfort would be to raise the box seat. I remember making a drawing of a carriage of this description, never supposing that it had already been done ; this is one more proof that invention repeats itself, if proof were needed, but the instances of its having done so are so numerous that no evidence is needed of this fact by those who pass their time in planning and contriving. A simultaneous invention, or two minds conceiving exactly the same thing in exactly the same way, and even at exactly the same time, is not surprising when one comes to consider it ; even poets and authors have given expression to exactly the same thought in exactly the same words, and yet it can be proved beyond doubt that neither one can have seen or read a word of the rival composition. A drawing can be had of the carriage to which I have made reference. For use in the country by a family composed of only a few members, and when it is desired occasionally to drive four horses, nothing could be more convenient, and even if a team be not driven it has the following advantages :

As a station carriage it has a considerable capacity

for carrying luggage, both in the boot, under the driver's seat, and on the top.

It holds four persons inside, and five outside, nine in all.

It forms both an open and close carriage, since people of not too advanced an age can ride outside as well as inside if sufficiently active to climb upon the roof, or a ladder such as is supplied to coaches might be made use of. It would be an excellent carriage for travelling with a team, or with two strong horses standing about 15.3 or 16 hands, or a light iron-framed rumble could be fitted behind for one or two grooms, and the passengers could either sit in or outside as they were inclined and according to what the weather might be.

Were two seats not fitted behind, the grooms would of course have to be disposed of elsewhere ; and although nothing looks worse than to see grooms always rushing to the horses' heads, or getting down from their seats without positive occasion for so doing, they should nevertheless be accommodated with seats in such a position that, in the event of requiring their services, they will be able to descend with quickness and in safety. Grooms or a guard on the back seat of a coach can manage to do this well enough, but the same thing would not be the case if they had to scramble up and down from a front seat whilst the vehicle was in motion.

There is one thing to which I have omitted to call attention. This is, that in the old days of coaching—let us say one hundred years ago—notwithstanding the great demand there must have been for horses, the prices were nothing like so high as they are now ; and even much later—fifty years ago—the prices were

exceedingly low. Bianconi did not, for his Irish cars, give more than ten pounds a horse, and he frequently purchased them for as low as five pounds.

Even speaking of fifty years ago reminds me what great strides have been made in the comfort and conveniences of people's lives during that period. Elsewhere I have spoken of one hundred years ago ; but take the past half-century, and, if we consider the change that has taken place during the past fifty years, we cannot fail to recognise how great is the general improvement that has been effected, and slowly and almost imperceptibly diffused, over the world, more especially in this particular quarter of the globe, and yet this past fifty years consists only of the period during which Queen Victoria has occupied the British throne. As fifty years ago was a period when persons journeyed on the road, I may not be wrong in referring to it.

Fifty years ago our agriculturist reaped with a sickle and threshed with a flail, instead of employing complicated machinery ; umbrellas were rarely used, and mackintosh coats were unknown. If one's house caught fire in town or country, only a hand fire-engine could be employed, since steam was practically unknown in its application to fire-engines ; neither was there, in those days, such a thing in use as a fire-escape. As for our soldiers, they slew the enemy at short range with an old musket possessing every fault a musket could possess. Our naval armament was built completely of wood, and, during hours of sickness, a Gamp of the old school and not a trained hospital nurse it was who watched beside the bed of suffering humanity.

The chimney-sweep consisted, not of a big brush

at the end of a succession of jointed rods, but of a small urchin probably stolen from his parents, and made to risk life and limb in ascending chimneys and ridding them of the soot which had accumulated therein. As for electricity, and its application to telegraphy, such a thing was unknown; but one might so multiply instances of general improvement that it would require an enormous volume to record every one of them. As for progress on wheels, wheels of some kind are always rotating and bearing onwards the inhabitants of this earth; and the great wheel of time, which is the only wheel that, to our knowledge, has ever solved the question of perpetual motion, as it journeys onward, naturally finds that a great improvement is observable in this world during its progression. Improvement and progress are words identical with civilisation. The fruits of the earth that were presented to mankind—notably to our first parents—were of such a multifarious nature that, even up to the present time, we are incapable of comprehending their full extent. Earth, and all thereon and therein, was one big puzzle, which it was man's vocation to piece together; the Deity created a being, not only with thews and sinews like the beasts of the field, but in His own image, and with a brain capable of enabling him to piece together this puzzle, by unravelling the mysteries of nature, and procuring, both from the surface of the earth and from what lay beneath it, all those things which, in course of time, would contribute to a perfect comprehension of its resources, so that eventually no portion of the earth within the reach of mankind would be left unexplored, and nothing upon or within it would remain unutilised. This gradual piecing together of this big puzzle constitutes the progress of civilisation. Un-

doubtedly, when all is accomplished that can be accomplished by mankind, then He who created will no longer withhold the threatened destruction of the world. Why such marvellous things should be created merely to be destroyed is beyond our comprehension ; the eventual fate of human beings themselves is sufficient to make us presumptuous in our curiosity, and impertinently anxious to obtain a solution of such problems.

But to descend from the sublime, not to the ridiculous, but to matters which would almost appear so after such an elevated flight into the realms of conjecture, and to speak of what is significant to the subject at present under consideration. I have on one of my carriages a cyclometer for measuring the distance travelled by carriages. The same thing is supplied to bicycles and tricycles ; and I have often thought that cabs might be fitted with a similar contrivance that should indicate upon a dial in the interior of the cab the distance traversed ; and there might even be a clock, which should indicate the time during which a cab waited at any particular place. Were any one to invent any such contrivances, and make them so skilfully that they would not get out of order, but would register both time and distance correctly as explained, I have no doubt there would be a very large sale for such instruments, and they would, if reliable, certainly be a great boon to the public, although cabmen might not manifest quite the same amount of pleasure in their use ; nevertheless, they would put an end to all disputes, as, if recognised by Government, there would be no gainsaying such evidence ; and there is no doubt that such machines could be easily contrived and supplied, if in large numbers, at a very low price. The

great objection to the cyclometer is that one cannot put the hands back. From the time it is first used it commences its registration, and, as one continues to use it, it goes on computing distance, so that, every time it is used, one has to remember the distance already registered on the dial. It certainly might be unwound by attaching it to the face-plate of a lathe, and, by working the lathe, reverse the action of the carriage-wheel ; but the labour of moving the treadle of the lathe sufficiently long to bring the hand back to the starting-point would be too great, and not worth one's while. It of course registers distance, owing to the successive revolutions of the carriage-wheel. The height of such wheel must be given to the makers of the cyclometer, that they may supply an instrument in exact accordance with the wheel of the vehicle for which it is intended. The maker's name and address from whom I obtained my cyclometer is Thompson, 4, King Street, Tower Hill, London, E. It is of course a patent.

When upon a driving tour it is useful, as one has not then to calculate distance upon maps with either compasses or any other instrument,* since you have on your carriage the very best register of distance that it is possible to imagine ; every yard of the way is indicated on the dial that forms, as it were, the screw cap on the box of the carriage wheel. If your carriage merely pulls across the road or in the course of your journey makes the slightest detour, you are conscious all the while that every yard of your way is being registered ; and on the close of a long day's journey, if there are no mile-stones to assist you, you can easily prove the correctness or incorrectness of the maps with which you are supplied, or verify the state-

* Perhaps the best instrument for measuring distances on a map is the Wealemeftna, sold by all mathematical instrument makers.

ments of the aborigines who are frequently apt to mistake distance, by a mere glance at your cyclometer. I do not know whether a cyclometer could be fitted to a mail axle. Probably not, until some alteration had been made in the outside plate, and some plan contrived for adapting it to such an axle; in any case it should not stand too far out, as it looks conspicuous, and is apt to get injured by passing vehicles.

There is one thing the importance of which travellers on wheels passing over our high and by-ways are forced to recognise, this is "horse-shoeing;" unless horses be sound on their legs the progress of vehicles to which they are attached is a matter of impossibility to any one who values their reputation for good sense and humanity.

I do not feel inclined to say more than a very few words on this subject, for reasons which may eventually appear; but I implore coachmen not to let smiths tamper with their horses' feet. For eight years I have never had a single horse lame, neither hunters nor carriage-horses, and I attribute this immunity merely to the fact that I never allow the frog to be cut, the sole to be pared, the heels to be opened, or the crust to be rasped, being firmly convinced that Nature, who orders all things for the best, takes under her especial care the horses, whom man has subjected and subordinated to his will and use, forcing them to quit the pastures where undoubtedly they would prefer to remain, in order that, upon the hard metallic surfaces of the high and by-ways of the world, these patient beasts may labour unceasingly in our service.

THE END.

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